

N83447.AR.000547
NAS FORT WORTH
5090.3a

FINAL RCRA FACILITY INVESTIGATION FOR AREA OF CONCERN 2 VOLUME 2 OF 2 PART
2 NAS FORT WORTH TX
11/1/2000
CH2M HILL

652 722B

File: 17G
P.W.



**NAVAL AIR STATION
FORT WORTH JRB
CARSWELL FIELD
TEXAS**

**ADMINISTRATIVE RECORD
COVER SHEET**

PART II OF II

AR File Number 652

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9712227	SW8260A	AHA086TB1	TB	VINYL CHLORIDE	1.1	U	1.1	UG/L
	AHA086TB1	TB		METHYLENE CHLORIDE	0.3	U	0.3	UG/L
	AHA086TB1	TB		1,2-DICHLOROETHANE	0.6	U	0.6	UG/L
	AHA086TB1	TB		HEXACHLOROBUTADIENE	1.1	U	1.1	UG/L
	AHA086TB1	TB		1,1,1-TRICHLOROETHANE	0.8	U	0.8	UG/L
	AHA086TB1	TB		1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4	UG/L
	AHA086TB1	TB		1,1,2-TRICHLOROETHANE	1	U	1	UG/L
	AHA086TB1	TB		1,1-DICHLOROETHANE	0.4	U	0.4	UG/L
	AHA086TB1	TB		1,1-DICHLOROETHENE	1.2	U	1.2	UG/L
	AHA086TB1	TB		1,1-DICHLOROPROPENE	1	U	1	UG/L
	AHA086TB1	TB		1,2,3-TRICHLOROBENZENE	0.3	U	0.3	UG/L
	AHA086TB1	TB		1,2,3-TRICHLOROPROPANE	3.2	U	3.2	UG/L
	AHA086TB1	TB		1,2,4-TRICHLOROBENZENE	0.4	U	0.4	UG/L
	AHA086TB1	TB		1,2,4-TRIMETHYLBENZENE	1.3	U	1.3	UG/L
	AHA086TB1	TB		1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6	UG/L
	AHA086TB1	TB		CARBON TETRACHLORIDE	2.1	U	2.1	UG/L
	AHA086TB1	TB		1,2-DICHLOROBENZENE	0.3	U	0.3	UG/L
	AHA086TB1	TB		BROMOMETHANE	1.1	U	1.1	UG/L
	AHA086TB1	TB		1,2-DICHLOROPROPANE	0.4	U	0.4	UG/L
	AHA086TB1	TB		1,3,5-TRIMETHYLBENZENE	0.5	U	0.5	UG/L
	AHA086TB1	TB		1,3-DICHLOROBENZENE	1.2	U	1.2	UG/L
	AHA086TB1	TB		1,3-DICHLOROPROPANE	0.4	U	0.4	UG/L
	AHA086TB1	TB		1,4-DICHLOROBENZENE	0.3	U	0.3	UG/L
	AHA086TB1	TB		1-CHLOROHEXANE	0.5	U	0.5	UG/L
	AHA086TB1	TB		2,2-DICHLOROPROPANE	3.5	U	3.5	UG/L
	AHA086TB1	TB		2-CHLOROTOLUENE	0.4	U	0.4	UG/L
	AHA086TB1	TB		4-CHLOROTOLUENE	0.6	U	0.6	UG/L
	AHA086TB1	TB		BENZENE	0.4	U	0.4	UG/L
	AHA086TB1	TB		BROMOBENZENE	0.3	U	0.3	UG/L
	AHA086TB1	TB		BROMOCHLOROMETHANE	0.4	U	0.4	UG/L
	AHA086TB1	TB		BROMODICHLOROMETHANE	0.8	U	0.8	UG/L
	AHA086TB1	TB		1,2-DIBROMOETHANE	0.6	U	0.6	UG/L
	AHA086TB1	TB		M,P-XYLENE	1.3	U	1.3	UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9712227	SW8260A	AHA087EB1	EB	1,2-DICHLOROETHANE	0.6	U	0.6	UG/L
	AHA087EB1	EB		BROMODICHLOROMETHANE	0.8	U	0.8	UG/L
	AHA087EB1	EB		BROMOCHLOROMETHANE	0.4	U	0.4	UG/L
	AHA087EB1	EB		BROMOBENZENE	0.3	U	0.3	UG/L
	AHA087EB1	EB		BENZENE	0.4	U	0.4	UG/L
	AHA087EB1	EB		4-CHLORTOLUENE	0.6	U	0.6	UG/L
	AHA087EB1	EB		2-CHLORTOLUENE	0.4	U	0.4	UG/L
	AHA087EB1	EB		2,2-DICHLOROPROPANE	3.5	U	3.5	UG/L
	AHA087EB1	EB		1-CHLOROHEXANE	0.5	U	0.5	UG/L
	AHA087EB1	EB		1,4-DICHLOROBENZENE	0.3	U	0.3	UG/L
	AHA087EB1	EB		1,3-DICHLOROPROPANE	0.4	U	0.4	UG/L
	AHA087EB1	EB		1,3-DICHLOROBENZENE	1.2	U	1.2	UG/L
	AHA087EB1	EB		1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5	UG/L
	AHA087EB1	EB		1,2-DICHLOROPROPANE	0.4	U	0.4	UG/L
	AHA087EB1	EB		CARBON TETRACHLORIDE	2.1	U	2.1	UG/L
	AHA087EB1	EB		1,2-DICHLOROBENZENE	0.3	U	0.3	UG/L
	AHA087EB1	EB		1,2-DIBROMOETHANE	0.6	U	0.6	UG/L
	AHA087EB1	EB		1,2-DIBromo-3-CHLOROPROPANE	2.6	U	2.6	UG/L
	AHA087EB1	EB		1,2,4-TRIMETHYLBENZENE	1.3	U	1.3	UG/L
	AHA087EB1	EB		1,2,4-TRICHLOROBENZENE	0.4	U	0.4	UG/L
	AHA087EB1	EB		1,2,3-TRICHLOROPROPANE	3.2	U	3.2	UG/L
	AHA087EB1	EB		1,2,3-TRICHLOROBENZENE	0.3	U	0.3	UG/L
	AHA087EB1	EB		1,1-DICHLOROPROPENE	1	U	1	UG/L
	AHA087EB1	EB		1,1-DICHLOROETHENE	1.2	U	1.2	UG/L
	AHA087EB1	EB		1,1-DICHLOROETHANE	0.4	U	0.4	UG/L
	AHA087EB1	EB		1,1,2-TRICHLOROETHANE	1	U	1	UG/L
	AHA087EB1	EB		1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4	UG/L
	AHA087EB1	EB		1,1,1-TRICHLOROETHANE	0.8	U	0.8	UG/L
	AHA087EB1	EB		1,3,5-TRIMETHYLBENZENE	0.5	U	0.5	UG/L
	AHA087EB1	EB		N-BUTYLBENZENE	1.1	U	1.1	UG/L
	AHA087EB1	EB		VINYL CHLORIDE	1.1	U	1.1	UG/L
	AHA087EB1	EB		TRICHLOROFLUOROMETHANE	0.8	U	0.8	UG/L
	AHA087EB1	EB		TRICHLOROETHENE	1	U	1	UG/L

SDG	Method ID	QCType	Analyte	Result	LabFlag	RL Units
9712227	SW8260A	AHA087EB1	EB	TRANS-1,3-DICHLOROPROPENE	1	U
		AHA087EB1	EB	TRANS-1,2-DICHLOROETHENE	0.6	U
		AHA087EB1	EB	TOLUENE	1.1	U
		AHA087EB1	EB	TETRACHLOROETHENE	1.4	U
		AHA087EB1	EB	TERT-BUTYLBENZENE	1.4	U
		AHA087EB1	EB	STYRENE	0.4	U
		AHA087EB1	EB	SEC-BUTYLBENZENE	1.3	U
		AHA087EB1	EB	P-ISOPROPYL TOLUENE	1.2	U
		AHA087EB1	EB	OXYLENE	1.1	U
		AHA087EB1	EB	BROMOFORM	1.2	U
		AHA087EB1	EB	N-PROPYLBENZENE	0.4	U
		AHA087EB1	EB	BROMOMETHANE	1.1	U
		AHA087EB1	EB	METHYLENE CHLORIDE	0.89	U
		AHA087EB1	EB	ISOPROPYL BENZENE	0.5	U
		AHA087EB1	EB	ETHYL BENZENE	0.6	U
		AHA087EB1	EB	DICHLORODIFLUOROMETHANE	1	U
		AHA087EB1	EB	DIBROMOMETHANE	2.4	U
		AHA087EB1	EB	DIBROMOCHLOROMETHANE	0.5	U
		AHA087EB1	EB	CIS-1,3-DICHLOROPROPENE	1	U
		AHA087EB1	EB	CIS-1,2-DICHLOROETHENE	1.2	U
		AHA087EB1	EB	CHLOROMETHANE	1.3	U
		AHA087EB1	EB	CHLOROFORM	0.3	U
		AHA087EB1	EB	CHLOROETHANE	1	U
		AHA087EB1	EB	CHLOROBENZENE	0.4	U
		AHA087EB1	EB	HEXACHLOROBUTADIENE	1.1	U
		AHA087EB1	EB	NAPHTHALENE	0.4	U
		AHA087EB1	EB	M,P,XYLENE	1.3	U
		AHA088AB1	AB	1,2-DICHLOROPROPROPANE	0.4	U
		AHA088AB1	AB	1,1,1,2-TETRACHLOROETHANE	0.5	U
		AHA088AB1	AB	BROMOFORM	0.5	U
		AHA088AB1	AB	BROMODICHLOROMETHANE	1.2	U
		AHA088AB1	AB	BROMOCHLOROMETHANE	0.8	U
		AHA088AB1	AB	BROMOBENZENE	0.4	U
		AHA088AB1	AB	0.3	U	0.3 UGL

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9712227	SW8260A	AHA088AB1	AB	BENZENE	0.4	U	0.4	UG/L
		AHA088AB1	AB	4-CHLOROTOLUENE	0.6	U	0.6	UG/L
		AHA088AB1	AB	2-CHLOROTOLUENE	0.4	U	0.4	UG/L
		AHA088AB1	AB	2,2-DICHLOROPROpane	3.5	U	3.5	UG/L
		AHA088AB1	AB	1-CHLOROHEXANE	0.5	U	0.5	UG/L
		AHA088AB1	AB	1,4-DICHLOROBENZENE	0.3	U	0.3	UG/L
		AHA088AB1	AB	1,3-DICHLOROPROPANE	0.4	U	0.4	UG/L
		AHA088AB1	AB	CARBON TETRACHLORIDE	2.1	U	2.1	UG/L
		AHA088AB1	AB	1,3,5-TRIMETHYLBENZENE	0.5	U	0.5	UG/L
		AHA088AB1	AB	CHLOROBENZENE	0.4	U	0.4	UG/L
		AHA088AB1	AB	1,2-DICHLOROETHANE	0.6	U	0.6	UG/L
		AHA088AB1	AB	1,2-DIBROMOETHANE	0.6	U	0.6	UG/L
		AHA088AB1	AB	1,2,4-TRIMETHYLBENZENE	1.3	U	1.3	UG/L
		AHA088AB1	AB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4	UG/L
		AHA088AB1	AB	1,2,3-TRICHLOROPROPANE	3.2	U	3.2	UG/L
		AHA088AB1	AB	1,2,3-TRICHLOROBENZENE	0.3	U	0.3	UG/L
		AHA088AB1	AB	1,1-DICHLOROPROPENE	1	U	1	UG/L
		AHA088AB1	AB	1,1-DICHLOROETHENE	1.2	U	1.2	UG/L
		AHA088AB1	AB	1,1-DICHLOROETHANE	0.4	U	0.4	UG/L
		AHA088AB1	AB	1,1,2-TRICHLOROETHANE	1	U	1	UG/L
		AHA088AB1	AB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4	UG/L
		AHA088AB1	AB	1,1,1-TRICHLOROETHANE	0.8	U	0.8	UG/L
		AHA088AB1	AB	1,3-DICHLOROBENZENE	1.2	U	1.2	UG/L
		AHA088AB1	AB	N-BUTYLBENZENE	1.1	U	1.1	UG/L
		AHA088AB1	AB	VINYL CHLORIDE	1.1	U	1.1	UG/L
		AHA088AB1	AB	TRICHLOROFLUOROMETHANE	0.8	U	0.8	UG/L
		AHA088AB1	AB	TRICHLOROETHENE	1	U	1	UG/L
		AHA088AB1	AB	TRANS-1,3-DICHLOROPROPENE	1	U	1	UG/L
		AHA088AB1	AB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6	UG/L
		AHA088AB1	AB	TOLUENE	1.1	U	1.1	UG/L
		AHA088AB1	AB	TETRACHLOROETHENE	1.4	U	1.4	UG/L
		AHA088AB1	AB	TERT-BUTYLBENZENE	1.4	U	1.4	UG/L
		AHA088AB1	AB	STYRENE	0.4	U	0.4	UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
971227	SW8260A	AHA088AB1	AB	SEC-BUTYLBENZENE	1.3	U	1.3	UG/L
		AHA088AB1	AB	P-ISOPROPYL TOLUENE	1.2	U	1.2	UG/L
		AHA088AB1	AB	O-XYLENE	1.1	U	1.1	UG/L
		AHA088AB1	AB	BROMOMETHANE	1.1	U	1.1	UG/L
		AHA088AB1	AB	N-PROPYLBENZENE	0.4	U	0.4	UG/L
		AHA088AB1	AB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6	UG/L
		AHA088AB1	AB	METHYLENE CHLORIDE	1.5	U	0.3	UG/L
		AHA088AB1	AB	M,P-XYLENE	1.3	U	1.3	UG/L
		AHA088AB1	AB	ISOPROPYLBENZENE	0.5	U	0.5	UG/L
		AHA088AB1	AB	HEXAChLOROBUTADIENE	1.1	U	1.1	UG/L
		AHA088AB1	AB	ETHYLBENZENE	0.6	U	0.6	UG/L
		AHA088AB1	AB	DICHLORODIFLUOROMETHANE	1	U	1	UG/L
		AHA088AB1	AB	DBROMOMETHANE	2.4	U	2.4	UG/L
		AHA088AB1	AB	DBROMOCHLOROMETHANE	0.5	U	0.5	UG/L
		AHA088AB1	AB	CIS-1,3-DICHLOROPROPENE	1	U	1	UG/L
		AHA088AB1	AB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2	UG/L
		AHA088AB1	AB	CHLOROMETHANE	1.3	U	1.3	UG/L
		AHA088AB1	AB	CHLOROFORM	0.3	U	0.3	UG/L
		AHA088AB1	AB	CHLOROETHANE	1	U	1	UG/L
		AHA088AB1	AB	NAPHTHALENE	0.4	U	0.4	UG/L
		AHA088AB1	AB	1,2-DICHLOROBENZENE	0.3	U	0.3	UG/L
		LABQC	LB	N-PROPYLBENZENE	0.4	U	0.4	UG/L
		LABQC	LB	METHYLENE CHLORIDE	0.72	U	0.3	UG/L
		LABQC	LB	BROMOFORM	1.2	U	1.2	UG/L
		LABQC	LB	N-BUTYL BENZENE	1.1	U	1.1	UG/L
		LABQC	LB	CARBON TETRACHLORIDE	2.1	U	2.1	UG/L
		LABQC	LB	BROMOMETHANE	1.1	U	1.1	UG/L
		LABQC	LB	TRICHLOROETHENE	1	U	1	UG/L
		LABQC	LB	CIS-1,3-DICHLOROPROPENE	1	U	1	UG/L
		LABQC	LB	VINYL CHLORIDE	1.1	U	1.1	UG/L
		LABQC	LB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6	UG/L
		LABQC	LB	NAPHTHALENE	0.4	U	0.4	UG/L
		LABQC	LB	CHLOROBENZENE	0.4	U	0.4	UG/L

SDG	Method	FieldID	QCType	Analyte	Result	LabFlag	RL	Units
9712227	SW8260A	LABQC	LB	CHLOROETHANE	1	U	1	UG/L
		LABQC	LB	CHLOROFORM	0.3	U	0.3	UG/L
		LABQC	LB	M,P-XYLENE	1.3	U	1.3	UG/L
		LABQC	LB	CHLOROMETHANE	1.3	U	1.3	UG/L
		LABQC	LB	TRICHLOROFLUOROMETHANE	0.8	U	0.8	UG/L
		LABQC	LB	ISOPROPYL BENZENE	0.5	U	0.5	UG/L
		LABQC	LB	TRANS-1,3-DICHLOROPROPENE	1	U	1	UG/L
		LABQC	LB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2	UG/L
		LABQC	LB	HEXA CHLOROBUTADIENE	1.1	U	1.1	UG/L
		LABQC	LB	1,4-DICHLOROBENZENE	0.3	U	0.3	UG/L
		LABQC	LB	DIBROMOCHLOROMETHANE	0.5	U	0.5	UG/L
		LABQC	LB	TETRACHLOROETHENE	1.4	U	1.4	UG/L
		LABQC	LB	4-CHLORTOLUENE	0.6	U	0.6	UG/L
		LABQC	LB	STYRENE	0.4	U	0.4	UG/L
		LABQC	LB	BROMODICHLOROMETHANE	0.8	U	0.8	UG/L
		LABQC	LB	SEC-BUTYL BENZENE	1.3	U	1.3	UG/L
		LABQC	LB	BENZENE	0.4	U	0.4	UG/L
		LABQC	LB	2,2-DICHLOROPROpane	3.5	U	3.5	UG/L
		LABQC	LB	P-ISOPROPYL TOLUENE	1.2	U	1.2	UG/L
		LABQC	LB	2-CHLORTOLUENE	0.4	U	0.4	UG/L
		LABQC	LB	TOLUENE	1.1	U	1.1	UG/L
		LABQC	LB	TERT-BUTYL BENZENE	1.4	U	1.4	UG/L
		LABQC	LB	DIBROMOMETHANE	2.4	U	2.4	UG/L
		LABQC	LB	ETHYL BENZENE	0.6	U	0.6	UG/L
		LABQC	LB	DICHLORODIFLUOROMETHANE	1	U	1	UG/L
		LABQC	LB	1-CHLOROHEXANE	0.5	U	0.5	UG/L
		LABQC	LB	BROMOCHLOROMETHANE	0.4	U	0.4	UG/L
		LABQC	LB	O-XYLENE	1.1	U	1.1	UG/L
		LABQC	LB	BROMOBENZENE	0.3	U	0.3	UG/L
		LABQC	LB	1,1,2-TRICHLOROETHANE	1	U	1	UG/L
		LABQC	LB	1,3-DICHLOROBENZENE	1.2	U	1.2	UG/L
		LABQC	LB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4	UG/L
		LABQC	LB	1,1-DICHLOROETHANE	0.4	U	0.4	UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9712227	SW8260A	LABQC	LB	1,2-DICHLOROETHANE	0.6	U	0.6	UG/L
		LABQC	LB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6	UG/L
		LABQC	LB	1,1-DICHLOROPROPENE	1	U	1	UG/L
		LABQC	LB	1,2,3-TRICHLOROPROPANE	3.2	U	3.2	UG/L
		LABQC	LB	1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5	UG/L
		LABQC	LB	1,2,3-TRICHLOROBENZENE	0.3	U	0.3	UG/L
		LABQC	LB	1,1-DICHLOROETHENE	1.2	U	1.2	UG/L
		LABQC	LB	1,2-DIBROMOETHANE	0.6	U	0.6	UG/L
		LABQC	LB	1,3-DICHLOROPROPANE	0.4	U	0.4	UG/L
		LABQC	LB	1,3,5-TRIMETHYLBENZENE	0.5	U	0.5	UG/L
		LABQC	LB	1,2,4-TRIMETHYLBENZENE	1.3	U	1.3	UG/L
		LABQC	LB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4	UG/L
		LABQC	LB	1,2-DICHLOROBENZENE	0.3	U	0.3	UG/L
		LABQC	LB	1,1,1-TRICHLOROETHANE	0.8	U	0.8	UG/L
		LABQC	LB	1,2-DICHLOROPROPANE	0.4	U	0.4	UG/L
		AHA097TB1	TB	1,2,3-TRICHLOROPROPANE	3.2	U	3.2	UG/L
		AHA097TB1	TB	1,3-DICHLOROPROPANE	0.4	U	0.4	UG/L
		AHA097TB1	TB	1,3-DICHLOROBENZENE	1.2	U	1.2	UG/L
		AHA097TB1	TB	1,3,5-TRIMETHYLBENZENE	0.5	U	0.5	UG/L
		AHA097TB1	TB	1,2-DICHLOROPROPANE	0.4	U	0.4	UG/L
		AHA097TB1	TB	1,2-DICHLOROETHANE	0.6	U	0.6	UG/L
		AHA097TB1	TB	1,2-DICHLOROBENZENE	0.3	U	0.3	UG/L
		AHA097TB1	TB	1,2-DIBROMOETHANE	0.6	U	0.6	UG/L
		AHA097TB1	TB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6	UG/L
		AHA097TB1	TB	1-CHLOROHEXANE	0.5	U	0.5	UG/L
		AHA097TB1	TB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4	UG/L
		AHA097TB1	TB	2,2-DICHLOROPROPANE	3.5	U	3.5	UG/L
		AHA097TB1	TB	1,2,3-TRICHLOROBENZENE	0.3	U	0.3	UG/L
		AHA097TB1	TB	1,1-DICHLOROPROPENE	1	U	1	UG/L
		AHA097TB1	TB	1,1-DICHLOROETHENE	1.2	U	1.2	UG/L
		AHA097TB1	TB	1,1-DICHLOROETHANE	0.4	U	0.4	UG/L
		AHA097TB1	TB	1,1,2-TRICHLOROETHANE	1	U	1	UG/L
		AHA097TB1	TB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4	UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9712240	SW8260A	AHA097TB1	TB	1,1,1-TRICHLOROETHANE	0.8	U	0.8	UG/L
	AHA097TB1	TB	1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5	UG/L	
	AHA097TB1	TB	1,2,4-TRIMETHYL BENZENE	1.3	U	1.3	UG/L	
	AHA097TB1	TB	CHLOROBENZENE	0.4	U	0.4	UG/L	
	AHA097TB1	TB	ISOPROPYL BENZENE	0.5	U	0.5	UG/L	
	AHA097TB1	TB	HEXACHLOROBUTADIENE	1.1	U	1.1	UG/L	
	AHA097TB1	TB	ETHYL BENZENE	0.6	U	0.6	UG/L	
	AHA097TB1	TB	DICHLORODIFLUOROMETHANE	1	U	1	UG/L	
	AHA097TB1	TB	DIBROMOMETHANE	2.4	U	2.4	UG/L	
	AHA097TB1	TB	DIBROMOCHLOROMETHANE	0.5	U	0.5	UG/L	
	AHA097TB1	TB	CIS-1,3-DICHLOROPROPENE	1	U	1	UG/L	
	AHA097TB1	TB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2	UG/L	
	AHA097TB1	TB	CHLOROMETHANE	1.3	U	1.3	UG/L	
	AHA097TB1	TB	1,4-DICHLOROBENZENE	0.3	U	0.3	UG/L	
	AHA097TB1	TB	CHLOROETHANE	1	U	1	UG/L	
	AHA097TB1	TB	M,P-XYLENE	1.3	U	1.3	UG/L	
	AHA097TB1	TB	CARBON TETRACHLORIDE	2.1	U	2.1	UG/L	
	AHA097TB1	TB	BROMOMETHANE	1.1	U	1.1	UG/L	
	AHA097TB1	TB	BROMOFORM	1.2	U	1.2	UG/L	
	AHA097TB1	TB	BROMODICHLOROMETHANE	0.8	U	0.8	UG/L	
	AHA097TB1	TB	BROMOCHLOROMETHANE	0.4	U	0.4	UG/L	
	AHA097TB1	TB	BROMOBENZENE	0.3	U	0.3	UG/L	
	AHA097TB1	TB	BENZENE	0.4	U	0.4	UG/L	
	AHA097TB1	TB	4-CHLOROTOLUENE	0.6	U	0.6	UG/L	
	AHA097TB1	TB	2-CHLOROTOLUENE	0.4	U	0.4	UG/L	
	AHA097TB1	TB	CHLOROFORM	0.75	U	0.3	UG/L	
	AHA097TB1	TB	VINYL CHLORIDE	1.1	U	1.1	UG/L	
	AHA097TB1	TB	STYRENE	0.4	U	0.4	UG/L	
	AHA097TB1	TB	O-XYLENE	1.1	U	1.1	UG/L	
	AHA097TB1	TB	TETRACHLOROETHENE	1.4	U	1.4	UG/L	
	AHA097TB1	TB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6	UG/L	

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9712240	SW8260A	AHA097TB1	TB	TRANS-1,3-DICHLOROPROPENE	1	U	1	UG/L
		AHA097TB1	TB	TRICHLOROFLUOROMETHANE	0.8	U	0.8	UG/L
		AHA097TB1	TB	SEC-BUTYLBENZENE	1.3	U	1.3	UG/L
		AHA097TB1	TB	N-PROPYLBENZENE	0.4	U	0.4	UG/L
		AHA097TB1	TB	P-ISOPROPYLTOLUENE	1.2	U	1.2	UG/L
		AHA097TB1	TB	NAPHTHALENE	0.4	U	0.4	UG/L
		AHA097TB1	TB	N-BUTYLBENZENE	1.1	U	1.1	UG/L
		AHA097TB1	TB	METHYLENE CHLORIDE	0.3	U	0.3	UG/L
		AHA097TB1	TB	TRICHLOROETHENE	1	U	1	UG/L
		AHA098EB1	EB	CIS-1,3-DICHLOROPROPENE	1	U	1	UG/L
		AHA098EB1	EB	TRANS-1,3-DICHLOROPROPENE	1	U	1	UG/L
		AHA098EB1	EB	TOLUENE	1.1	U	1.1	UG/L
		AHA098EB1	EB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6	UG/L
		AHA098EB1	EB	TETRACHLOROETHENE	1.4	U	1.4	UG/L
		AHA098EB1	EB	TERT-BUTYLBENZENE	1.4	U	1.4	UG/L
		AHA098EB1	EB	STYRENE	0.4	U	0.4	UG/L
		AHA098EB1	EB	SEC-BUTYLBENZENE	1.3	U	1.3	UG/L
		AHA098EB1	EB	TRICHLOROETHENE	1	U	1	UG/L
		AHA098EB1	EB	P-ISOPROPYLTOLUENE	1.2	U	1.2	UG/L
		AHA098EB1	EB	METHYLENE CHLORIDE	0.88	U	0.3	UG/L
		AHA098EB1	EB	N-BUTYLBENZENE	1.1	U	1.1	UG/L
		AHA098EB1	EB	N-PROPYLBENZENE	0.4	U	0.4	UG/L
		AHA098EB1	EB	NAPHTHALENE	0.4	U	0.4	UG/L
		AHA098EB1	EB	OXYLENE	1.1	U	1.1	UG/L
		AHA098EB1	EB	VINYL CHLORIDE	1.1	U	1.1	UG/L
		AHA098EB1	EB	TRICHLOROFLUOROMETHANE	0.8	U	0.8	UG/L
		AHA098EB1	EB	BROMODICHLOROMETHANE	0.8	U	0.8	UG/L
		AHA098EB1	EB	1,4-DICHLOROBENZENE	0.3	U	0.3	UG/L
		AHA098EB1	EB	1-CHLOROHEXANE	0.5	U	0.5	UG/L
		AHA098EB1	EB	2,2-DICHLOROPROpane	3.5	U	3.5	UG/L
		AHA098EB1	EB	2-CHLOROTOLUENE	0.4	U	0.4	UG/L
		AHA098EB1	EB	4-CHLOROTOLUENE	0.6	U	0.6	UG/L
		AHA098EB1	EB	BENZENE	0.4	U	0.4	UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL Units
9712240	SW8260A	AHA098EBI	EB	CHLOROMETHANE	1.3	U	1.3 UGL
		AHA098EBI	EB	BROMOCHLOROMETHANE	0.4	U	0.4 UGL
		AHA098EBI	EB	1,3,5-TRIMETHYLBENZENE	0.5	U	0.5 UGL
		AHA098EBI	EB	BROMOFORM	1.2	U	1.2 UGL
		AHA098EBI	EB	BROMOMETHANE	1.1	U	1.1 UGL
		AHA098EBI	EB	CARBON TETRACHLORIDE	2.1	U	2.1 UGL
		AHA098EBI	EB	CHLOROBENZENE	0.4	U	0.4 UGL
		AHA098EBI	EB	CHLOROETHANE	1	U	1 UGL
		AHA098EBI	EB	CHLOROFORM	0.3	U	0.3 UGL
		AHA098EBI	EB	BROMOBENZENE	0.3	U	0.3 UGL
		AHA098EBI	EB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4 UGL
		AHA098EBI	EB	1,1,2-TETRACHLOROETHANE	0.5	U	0.5 UGL
		AHA098EBI	EB	1,1,1,2-TRICHLOROETHANE	0.8	U	0.8 UGL
		AHA098EBI	EB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4 UGL
		AHA098EBI	EB	1,1,2-TRICHLOROETHANE	1	U	1 UGL
		AHA098EBI	EB	1,1-DICHLOROETHANE	0.4	U	0.4 UGL
		AHA098EBI	EB	1,1-DICHLOROETHENE	1.2	U	1.2 UGL
		AHA098EBI	EB	1,3-DICHLOROPROPANE	0.4	U	0.4 UGL
		AHA098EBI	EB	1,2,3-TRICHLOROBENZENE	0.3	U	0.3 UGL
		AHA098EBI	EB	1,3-DICHLOROBENZENE	1.2	U	1.2 UGL
		AHA098EBI	EB	1,2,4-TRIMETHYLBENZENE	1.3	U	1.3 UGL
		AHA098EBI	EB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6 UGL
		AHA098EBI	EB	1,2-DIBROMOETHANE	0.6	U	0.6 UGL
		AHA098EBI	EB	1,2-DICHLOROBENZENE	0.3	U	0.3 UGL
		AHA098EBI	EB	1,2-DICHLOROETHANE	0.6	U	0.6 UGL
		AHA098EBI	EB	1,2-DICHLOROPROPANE	0.4	U	0.4 UGL
		AHA098EBI	EB	1,2,3-TRICHLOROPROPANE	3.2	U	3.2 UGL
		AHA098EBI	EB	DIBROMOMETHANE	2.4	U	2.4 UGL
		AHA098EBI	EB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2 UGL
		AHA098EBI	EB	ETHYL BENZENE	0.6	U	0.6 UGL
		AHA098EBI	EB	1,1-DICHLOROPROPENE	1	U	1 UGL
		AHA098EBI	EB	M,P-XYLENE	1.3	U	1.3 UGL
		AHA098EBI	EB	DIBROMOCHLOROMETHANE	0.5	U	0.5 UGL

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9712240	SW8260A	AHA098EB1	EB	DICHLORODIFLUOROMETHANE	1	U	1	UG/L
	AHA098EB1	EB		ISOPROPYLBENZENE	0.5	U	0.5	UG/L
	AHA098EB1	EB		HEXACHLOROBUTADIENE	1.1	U	1.1	UG/L
	LABQC	LB		CHLOROMETHANE	1.3	U	1.3	UG/L
	LABQC	LB		CHLOROFORM	0.3	U	0.3	UG/L
	LABQC	LB		M,P-XYLENE	1.3	U	1.3	UG/L
	LABQC	LB		1,4-DICHLOROBENZENE	0.3	U	0.3	UG/L
	LABQC	LB		STYRENE	0.4	U	0.4	UG/L
	LABQC	LB		TRICHLOROFLUOROMETHANE	0.8	U	0.8	UG/L
	LABQC	LB		2,2-DICHLOROPROpane	3.5	U	3.5	UG/L
	LABQC	LB		CIS-1,2-DICHLOROETHENE	1.2	U	1.2	UG/L
	LABQC	LB		TETRACHLOROETHENE	1.4	U	1.4	UG/L
	LABQC	LB		CHLOROBENZENE	0.4	U	0.4	UG/L
	LABQC	LB		TERT-BUTYLBENZENE	1.4	U	1.4	UG/L
	LABQC	LB		1-CHLOROHEXANE	0.5	U	0.5	UG/L
	LABQC	LB		HEXACHLOROBUTADIENE	1.1	U	1.1	UG/L
	LABQC	LB		ISOPROPYLBENZENE	0.5	U	0.5	UG/L
	LABQC	LB		TRANS-1,3-DICHLOROPROPENE	1	U	1	UG/L
	LABQC	LB		CARBON TETRACHLORIDE	2.1	U	2.1	UG/L
	LABQC	LB		BROMODICHLOROMETHANE	0.8	U	0.8	UG/L
	LABQC	LB		NAPHTHALENE	0.4	U	0.4	UG/L
	LABQC	LB		BROMOCHLOROMETHANE	0.4	U	0.4	UG/L
	LABQC	LB		CIS-1,3-DICHLOROPROPENE	1	U	1	UG/L
	LABQC	LB		N-PROPYLBENZENE	0.4	U	0.4	UG/L
	LABQC	LB		OXYLENE	1.1	U	1.1	UG/L
	LABQC	LB		BROMOBENZENE	0.3	U	0.3	UG/L
	LABQC	LB		BROMOMETHANE	1.1	U	1.1	UG/L
	LABQC	LB		4-CHLOROTOLUENE	0.6	U	0.6	UG/L
	LABQC	LB		TOLUENE	1.1	U	1.1	UG/L
	LABQC	LB		CHLOROETHANE	1	U	1	UG/L
	LABQC	LB		VINYL CHLORIDE	1.1	U	1.1	UG/L
	LABQC	LB		P-ISOPROPYL TOLUENE	1.2	U	1.2	UG/L
	LABQC	LB		BENZENE	0.4	U	0.4	UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL Units
9712240	SW8260A	LABQC	LB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6 UG/L
		LABQC	LB	SEC-BUTYLBENZENE	1.3	U	1.3 UG/L
		LABQC	LB	METHYLENE CHLORIDE	0.65		0.3 UG/L
		LABQC	LB	BROMOFORM	1.2	U	1.2 UG/L
		LABQC	LB	2-CHLOROTOLUENE	0.4	U	0.4 UG/L
		LABQC	LB	N-BUTYLBENZENE	1.1	U	1.1 UG/L
		LABQC	LB	DIBROMOMETHANE	2.4	U	2.4 UG/L
		LABQC	LB	DICHLORODIFLUOROMETHANE	1	U	1 UG/L
		LABQC	LB	ETHYLBENZENE	0.6	U	0.6 UG/L
		LABQC	LB	DIBROMOCHLOROMETHANE	0.5	U	0.5 UG/L
		LABQC	LB	TRICHLOROETHENE	1	U	1 UG/L
		LABQC	LB	1,1,1-TRICHLOROETHANE	0.8	U	0.8 UG/L
		LABQC	LB	1,3,5-TRIMETHYLBENZENE	0.5	U	0.5 UG/L
		LABQC	LB	1,1-DICHLOROETHANE	0.4	U	0.4 UG/L
		LABQC	LB	1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5 UG/L
		LABQC	LB	1,3-DICHLOROPROPANE	0.4	U	0.4 UG/L
		LABQC	LB	1,1-DICHLOROETHENE	1.2	U	1.2 UG/L
		LABQC	LB	1,2-DICHLOROBENZENE	0.3	U	0.3 UG/L
		LABQC	LB	1,1,2-TRICHLOROETHANE	1	U	1 UG/L
		LABQC	LB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6 UG/L
		LABQC	LB	1,3-DICHLOROBENZENE	1.2	U	1.2 UG/L
		LABQC	LB	1,1-DICHLOROPROPENE	1	U	1 UG/L
		LABQC	LB	1,2-DIBROMOETHANE	0.6	U	0.6 UG/L
		LABQC	LB	1,2,4-TRIMETHYLBENZENE	1.3	U	1.3 UG/L
		LABQC	LB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4 UG/L
		LABQC	LB	1,2-DICHLOROETHANE	0.6	U	0.6 UG/L
		LABQC	LB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4 UG/L
		LABQC	LB	1,2,3-TRICHLOROPROPANE	3.2	U	3.2 UG/L
		LABQC	LB	1,2,3-TRICHLOROBENZENE	0.3	U	0.3 UG/L
		LABQC	LB	1,2-DICHLOROPROPANE	0.4	U	0.4 UG/L
	E310.1	AHA056EB1	EB	TOTAL ALKALINITY	10	U	10 MG/L
		LABQC	LB	TOTAL ALKALINITY	10	U	10 MG/L
		SW6010A AHA056EB1	EB	ALUMINUM	44.2	U	44.2 UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9712254	SW6010A	AHA056EB1	EB	SODIUM	60.5	U	60.5	UG/L
		AHA056EB1	EB	POTASSIUM	69.9	U	69.9	UG/L
		AHA056EB1	EB	MAGNESIUM	95.4	U	95.4	UG/L
		AHA056EB1	EB	LEAD	31.2	U	31.2	UG/L
		AHA056EB1	EB	CALCIUM	104	U	104	UG/L
		AHA056EB1	EB	IRON	8.4	F	8	UG/L
	PBW	LB		CALCIUM	104	U	104	UG/L
	PBW	LB		SODIUM	60.5	U	60.5	UG/L
	PBW	LB		ALUMINUM	44.2	U	44.2	UG/L
	PBW	LB		MAGNESIUM	95.4	U	95.4	UG/L
	PBW	LB		LEAD	31.2	U	31.2	UG/L
	PBW	LB		IRON	12.46	F	8	UG/L
	PBW	LB		POTASSIUM	69.9	U	69.9	UG/L
SW8260A	AHA056EB1	BB		1,2,3-TRICHLOROBENZENE	0.3	U	0.3	UG/L
	AHA056EB1	BB		P-ISOPROPYL TOLUENE	1.2	U	1.2	UG/L
	AHA056EB1	BB		O-XYLENE	1.1	U	1.1	UG/L
	AHA056EB1	BB		ETHYL BENZENE	0.6	U	0.6	UG/L
	AHA056EB1	BB		DICHLORODIFLUOROMETHANE	1	U	1	UG/L
	AHA056EB1	BB		HEXA CHLOROBUTADIENE	1.1	U	1.1	UG/L
	AHA056EB1	BB		DIBROMOCHLOROMETHANE	0.5	U	0.5	UG/L
	AHA056EB1	BB		STYRENE	0.4	U	0.4	UG/L
	AHA056EB1	BB		CIS-1,3-DICHLOROPROPENE	1	U	1	UG/L
	AHA056EB1	BB		CIS-1,2-DICHLOROETHENE	1.2	U	1.2	UG/L
	AHA056EB1	BB		CHLOROMETHANE	1.3	U	1.3	UG/L
	AHA056EB1	BB		CHLOROFORM	0.3	U	0.3	UG/L
	AHA056EB1	BB		CHLOROETHANE	1	U	1	UG/L
	AHA056EB1	BB		CARBON TETRACHLORIDE	2.1	U	2.1	UG/L
	AHA056EB1	BB		DBROMOMETHANE	2.4	U	2.4	UG/L
	AHA056EB1	BB		N-BUTYL BENZENE	1.1	U	1.1	UG/L
	AHA056EB1	BB		TOLUENE	1.1	U	1.1	UG/L
	AHA056EB1	BB		TRANS-1,2-DICHLOROETHENE	0.6	U	0.6	UG/L
	AHA056EB1	BB		TRANS-1,3-DICHLOROPROPENE	1	U	1	UG/L
	AHA056EB1	BB		TRICHLOROETHENE	1	U	1	UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9712254	SW8260A	AHA056EB1	EB	TRICHLOROFLUOROMETHANE	0.8	U	0.8	UG/L
		AHA056EB1	EB	SEC-BUTYLBENZENE	1.3	U	1.3	UG/L
		AHA056EB1	EB	N-PROPYLBENZENE	0.4	U	0.4	UG/L
		AHA056EB1	EB	TETRACHLOROETHENE	1.4	U	1.4	UG/L
		AHA056EB1	EB	METHYLENE CHLORIDE	0.84	U	0.3	UG/L
		AHA056EB1	EB	M,P-XYLENE	1.3	U	1.3	UG/L
		AHA056EB1	EB	ISOPROPYLBENZENE	0.5	U	0.5	UG/L
		AHA056EB1	EB	BROMOMETHANE	1.1	U	1.1	UG/L
		AHA056EB1	EB	TERT-BUTYLBENZENE	1.4	U	1.4	UG/L
		AHA056EB1	EB	2-CHLOROTOLUENE	0.4	U	0.4	UG/L
		AHA056EB1	EB	VINYL CHLORIDE	1.1	U	1.1	UG/L
		AHA056EB1	EB	1,4-DICHLOROBENZENE	0.3	U	0.3	UG/L
		AHA056EB1	EB	1,2-DIBROMOETHANE	0.6	U	0.6	UG/L
		AHA056EB1	EB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6	UG/L
		AHA056EB1	EB	1,2,4-TRIMETHYLBENZENE	1.3	U	1.3	UG/L
		AHA056EB1	EB	1,2-DICHLOROETHANE	0.6	U	0.6	UG/L
		AHA056EB1	EB	1,2-DICHLOROPROPANE	0.4	U	0.4	UG/L
		AHA056EB1	EB	1,3,5-TRIMETHYLBENZENE	0.5	U	0.5	UG/L
		AHA056EB1	EB	1,3-DICHLOROBENZENE	1.2	U	1.2	UG/L
		AHA056EB1	EB	CHLOROBENZENE	0.4	U	0.4	UG/L
		AHA056EB1	EB	1,3-DICHLOROPROPANE	0.4	U	0.4	UG/L
		AHA056EB1	EB	BROMOFORM	1.2	U	1.2	UG/L
		AHA056EB1	EB	1,2,3-TRICHLOROPROPANE	3.2	U	3.2	UG/L
		AHA056EB1	EB	NAPHTHALENE	0.4	U	0.4	UG/L
		AHA056EB1	EB	1,2-DICHLOROBENZENE	0.3	U	0.3	UG/L
		AHA056EB1	EB	BENZENE	0.4	U	0.4	UG/L
		AHA056EB1	EB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4	UG/L
		AHA056EB1	EB	1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5	UG/L
		AHA056EB1	EB	1,1,1-TRICHLOROETHANE	0.8	U	0.8	UG/L
		AHA056EB1	EB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4	UG/L
		AHA056EB1	EB	1,1,2-TRICHLOROETHANE	1	U	1	UG/L
		AHA056EB1	EB	1-CHLOROHEXANE	0.5	U	0.5	UG/L
		AHA056EB1	EB	1,1-DICHLOROETHANE	0.4	U	0.4	UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9712254	SW8260A	AHA056EBI	EB	1,1-DICHLOROETHENE	1.2	U	1.2	UG/L
	AHA056EBI	EB	1,1-DICHLOROPROPENE		1	U	1	UG/L
	AHA056EBI	EB	2,2-DICHLOROPROPANE		3.5	U	3.5	UG/L
	AHA056EBI	EB	BROMOBENZENE		0.3	U	0.3	UG/L
	AHA056EBI	EB	BROMOCHLOROMETHANE		0.4	U	0.4	UG/L
	AHA056EBI	EB	BROMODICHLOROMETHANE		0.8	U	0.8	UG/L
	AHA056EBI	EB	4-CHLOROTOLUENE		0.6	U	0.6	UG/L
	LABQC	LB	CHLOROFORM		0.3	U	0.3	UG/L
	LABQC	LB	BROMOFORM		1.2	U	1.2	UG/L
	LABQC	LB	ISOPROPYLBENZENE		0.5	U	0.5	UG/L
	LABQC	LB	M,P-XYLENE		1.3	U	1.3	UG/L
	LABQC	LB	4-CHLOROTOLUENE		0.6	U	0.6	UG/L
	LABQC	LB	CHLOROMETHANE		1.3	U	1.3	UG/L
	LABQC	LB	SEC-BUTYLBENZENE		1.3	U	1.3	UG/L
	LABQC	LB	BENZENE		0.4	U	0.4	UG/L
	LABQC	LB	TRICHLOROETHENE		1	U	1	UG/L
	LABQC	LB	TRANS-1,3-DICHLOROPROPENE		1	U	1	UG/L
	LABQC	LB	P-ISOPROPYL TOLUENE		1.2	U	1.2	UG/L
	LABQC	LB	NAPHTHALENE		0.4	U	0.4	UG/L
	LABQC	LB	CIS-1,3-DICHLOROPROPENE		1	U	1	UG/L
	LABQC	LB	DIBROMOMETHANE		2.4	U	2.4	UG/L
	LABQC	LB	BROMOBENZENE		0.3	U	0.3	UG/L
	LABQC	LB	BROMODICHLOROMETHANE		0.8	U	0.8	UG/L
	LABQC	LB	CHLOROETHANE		1	U	1	UG/L
	LABQC	LB	O-XYLENE		1.1	U	1.1	UG/L
	LABQC	LB	TOLUENE		1.1	U	1.1	UG/L
	LABQC	LB	ETHYL BENZENE		0.6	U	0.6	UG/L
	LABQC	LB	BROMOCHLOROMETHANE		0.4	U	0.4	UG/L
	LABQC	LB	TRICHLOROFLUOROMETHANE		0.8	U	0.8	UG/L
	LABQC	LB	CHLOROBENZENE		0.4	U	0.4	UG/L
	LABQC	LB	N-PROPYLBENZENE		0.4	U	0.4	UG/L
	LABQC	LB	VINYL CHLORIDE		1.1	U	1.1	UG/L
	LABQC	LB	TETRACHLOROETHENE		1.4	U	1.4	UG/L

SDG	Method	Field ID	QCType	Analyte	QCType	Result	LabFlag	RL	Units
9712254	SW8260A	LABQC	LB	1-CHLOROHEXANE		0.5	U	0.5	UG/L
	LABQC	LB		TRANS-1,2-DICHLOROETHENE		0.6	U	0.6	UG/L
	LABQC	LB		HEXAChLOROBUTADIENE		1.1	U	1.1	UG/L
	LABQC	LB		2,2-DICHLOROPROpane		3.5	U	3.5	UG/L
	LABQC	LB		DIBROMOCHLOROMETHANE		0.5	U	0.5	UG/L
	LABQC	LB		CARBON TETRACHLORIDE		2.1	U	2.1	UG/L
	LABQC	LB		TERT-BUTYL BENZENE		1.4	U	1.4	UG/L
	LABQC	LB		N-BUTYL BENZENE		1.1	U	1.1	UG/L
	LABQC	LB		METHYLENE CHLORIDE		0.86		0.3	UG/L
	LABQC	LB		STYRENE		0.4	U	0.4	UG/L
	LABQC	LB		2-CHLORTOLUENE		0.4	U	0.4	UG/L
	LABQC	LB		BROMOMETHANE		1.1	U	1.1	UG/L
	LABQC	LB		CIS-1,2-DICHLOROETHENE		1.2	U	1.2	UG/L
	LABQC	LB		1,4-DICHLOROBENZENE		0.3	U	0.3	UG/L
	LABQC	LB		DICHLORODIFLUOROMETHANE		1	U	1	UG/L
	LABQC	LB		1,1,2-TRICHLOROETHANE		1	U	1	UG/L
	LABQC	LB		1,3-DICHLOROPROPANE		0.4	U	0.4	UG/L
	LABQC	LB		1,3-DICHLOROBENZENE		1.2	U	1.2	UG/L
	LABQC	LB		1,3,5-TRIMETHYLBENZENE		0.5	U	0.5	UG/L
	LABQC	LB		1,1-DICHLOROPROPENE		1	U	1	UG/L
	LABQC	LB		1,2-DICHLOROPROPANE		0.4	U	0.4	UG/L
	LABQC	LB		1,1,1,2-TETRACHLOROETHANE		0.5	U	0.5	UG/L
	LABQC	LB		1,2-DIBROMO-3-CHLOROPROPANE		2.6	U	2.6	UG/L
	LABQC	LB		1,1,1-TRICHLOROETHANE		0.8	U	0.8	UG/L
	LABQC	LB		1,2-DICHLOROETHANE		0.6	U	0.6	UG/L
	LABQC	LB		1,2-DICHLOROBENZENE		0.3	U	0.3	UG/L
	LABQC	LB		1,1,2,2-TETRACHLOROETHANE		0.4	U	0.4	UG/L
	LABQC	LB		1,2,3-TRICHLOROBENZENE		0.3	U	0.3	UG/L
	LABQC	LB		1,2-DIBROMOETHANE		0.6	U	0.6	UG/L
	LABQC	LB		1,2,3-TRICHLOROPROPANE		3.2	U	3.2	UG/L
	LABQC	LB		1,2,4-TRIMETHYLBENZENE		1.3	U	1.3	UG/L
	LABQC	LB		1,1-DICHLOROETHANE		0.4	U	0.4	UG/L
	LABQC	LB		1,1-DICHLOROETHENE		1.2	U	1.2	UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL Units
9712254	SW8260A	LABQC	LB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4 U/G/L
	SW9056	AHA056EB1	EB	SULFATE	0.2	U	0.2 M/G/L
	AHA056EB1	EB	BROMIDE		0.1	U	0.1 M/G/L
	AHA056EB1	EB	CHLORIDE		0.2	U	0.2 M/G/L
	AHA056EB1	EB	FLUORIDE		0.2	U	0.2 M/G/L
	AHA056EB1	EB	NITRATE		0.1	U	0.1 M/G/L
	AHA056EB1	EB	ORTHOPHOSPHATE		0.1	U	0.1 M/G/L
	AHA056EB1	EB	NITRITE		0.4	U	0.4 M/G/L
	LABQC	LB	NITRATE		0.1	U	0.1 M/G/L
	LABQC	LB	NITRITE		0.4	U	0.4 M/G/L
	LABQC	LB	ORTHOPHOSPHATE		0.1	U	0.1 M/G/L
	LABQC	LB	FLUORIDE		0.2	U	0.2 M/G/L
	LABQC	LB	SULFATE		0.2	U	0.2 M/G/L
	LABQC	LB	CHLORIDE		0.2	U	0.2 M/G/L
	LABQC	LB	BROMIDE		0.1	U	0.1 M/G/L
	SW9060	AHA056EB1	EB	TOTAL ORGANIC CARBON	1	U	1 M/G/L
	LABQC	LB	TOTAL ORGANIC CARBON		1	U	1 M/G/L
	SW9060	LABQC	LB	TOTAL ORGANIC CARBON	20	U	20 MG/KG
	SW8260A	AIA001TB1	TB	N-BUTYL BENZENE	1.1	U	1.1 U/G/L
		AIA001TB1	TB	P-ISOPROPYL TOLUENE	1.2	U	1.2 U/G/L
		AIA001TB1	TB	O-XYLENE	1.1	U	1.1 U/G/L
		AIA001TB1	TB	1,2,3-TRICHLOROBENZENE	0.3	U	0.3 U/G/L
		AIA001TB1	TB	N-PROPYLBENZENE	0.4	U	0.4 U/G/L
		AIA001TB1	TB	1,1-DICHLOROETHANE	0.4	U	0.4 U/G/L
		AIA001TB1	TB	1,2,3-TRICHLOROPROPANE	3.2	U	3.2 U/G/L
		AIA001TB1	TB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4 U/G/L
		AIA001TB1	TB	METHYLENE CHLORIDE	0.3	U	0.3 U/G/L
		AIA001TB1	TB	1,2-DIBROMO-3-CHLOROPROpane	2.6	U	2.6 U/G/L
		AIA001TB1	TB	m,p-xylene	1.3	U	1.3 U/G/L
		AIA001TB1	TB	NAPHTHALENE	0.4	U	0.4 U/G/L
		AIA001TB1	TB	ISOPROPYL BENZENE	0.5	U	0.5 U/G/L
		AIA001TB1	TB	1,1-DICHLOROETHENE	1.2	U	1.2 U/G/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL Units
9802130	SW8260A	AIA001TBI	TB	1,1,2-TRICHLOROETHANE	1	U	1 UGL
		AIA001TBI	TB	SEC-BUTYLBENZENE	1.3	U	1.3 UGL
		AIA001TBI	TB	STYRENE	0.4	U	0.4 UGL
		AIA001TBI	TB	TERT-BUTYLBENZENE	1.4	U	1.4 UGL
		AIA001TBI	TB	TETRACHLOROETHENE	1.4	U	1.4 UGL
		AIA001TBI	TB	TOLUENE	1.1	U	1.1 UGL
		AIA001TBI	TB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6 UGL
		AIA001TBI	TB	TRANS-1,3-DICHLOROPROPENE	1	U	1 UGL
		AIA001TBI	TB	TRICHLOROETHENE	1	U	1 UGL
		AIA001TBI	TB	TRICHLOROFLUOROMETHANE	0.8	U	0.8 UGL
		AIA001TBI	TB	VINYL CHLORIDE	1.1	U	1.1 UGL
		AIA001TBI	TB	1,1-DICHLOROPROPENE	1	U	1 UGL
		AIA001TBI	TB	CHLOROFORM	0.3	U	0.3 UGL
		AIA001TBI	TB	BROMOFORM	1.2	U	1.2 UGL
		AIA001TBI	TB	BROMODICHLOROMETHANE	0.8	U	0.8 UGL
		AIA001TBI	TB	BROMOCHLOROMETHANE	0.4	U	0.4 UGL
		AIA001TBI	TB	BROMOBENZENE	0.3	U	0.3 UGL
		AIA001TBI	TB	BENZENE	0.4	U	0.4 UGL
		AIA001TBI	TB	4-CHLOROTOLUENE	0.6	U	0.6 UGL
		AIA001TBI	TB	2-CHLORTOLUENE	0.4	U	0.4 UGL
		AIA001TBI	TB	1,2,4-TRIMETHYLBENZENE	1.3	U	1.3 UGL
		AIA001TBI	TB	CARBON TETRACHLORIDE	2.1	U	2.1 UGL
		AIA001TBI	TB	CHLOROBENZENE	0.4	U	0.4 UGL
		AIA001TBI	TB	1-CHLOROHEXANE	0.5	U	0.5 UGL
		AIA001TBI	TB	1,4-DICHLOROBENZENE	0.3	U	0.3 UGL
		AIA001TBI	TB	HEXACHLOROBUTADIENE	1.1	U	1.1 UGL
		AIA001TBI	TB	CHLOROETHANE	1	U	1 UGL
		AIA001TBI	TB	2,2-DICHLOROPROPANE	3.5	U	3.5 UGL
		AIA001TBI	TB	1,3-DICHLOROBENZENE	1.2	U	1.2 UGL
		AIA001TBI	TB	1,3,5-TRIMETHYLBENZENE	0.5	U	0.5 UGL
		AIA001TBI	TB	1,2-DICHLOROPROPANE	0.4	U	0.4 UGL
		AIA001TBI	TB	1,2-DICHLOROETHANE	0.6	U	0.6 UGL
		AIA001TBI	TB	1,2-DICHLOROBENZENE	0.3	U	0.3 UGL

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9802130	SW820A	AIA001TB1	TB	CHLROMETHANE	1.3	U	1.3	UG/L
		AIA001TB1	TB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2	UG/L
		AIA001TB1	TB	CIS-1,3-DICHLOROPROPENE	1	U	1	UG/L
		AIA001TB1	TB	DIBROMOCHLOROMETHANE	0.5	U	0.5	UG/L
		AIA001TB1	TB	DIBROMOMETHANE	2.4	U	2.4	UG/L
		AIA001TB1	TB	DICHLORODIFLUOROMETHANE	1	U	1	UG/L
		AIA001TB1	TB	BROMOMETHANE	1.1	U	1.1	UG/L
		AIA001TB1	TB	ETHYL BENZENE	0.6	U	0.6	UG/L
		AIA001TB1	TB	1,3-DICHLOROPROPANE	0.4	U	0.4	UG/L
		AIA001TB1	TB	1,1,1-TRICHLOROETHANE	0.8	U	0.8	UG/L
		AIA001TB1	TB	1,2-DIBROMOETHANE	0.6	U	0.6	UG/L
		AIA001TB1	TB	1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5	UG/L
		AIA001TB1	TB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4	UG/L
		AIA002EB1	EB	CIS-1,3-DICHLOROPROPENE	1	U	1	UG/L
		AIA002EB1	EB	BROMOCHLOROMETHANE	0.4	U	0.4	UG/L
		AIA002EB1	EB	1,2-DIBROMOETHANE	0.6	U	0.6	UG/L
		AIA002EB1	EB	BROMODICHLOROMETHANE	0.8	U	0.8	UG/L
		AIA002EB1	EB	BROMOFORM	1.2	U	1.2	UG/L
		AIA002EB1	EB	BROMOMETHANE	1.1	U	1.1	UG/L
		AIA002EB1	EB	CARBON TETRACHLORIDE	2.1	U	2.1	UG/L
		AIA002EB1	EB	CHLOROBENZENE	0.4	U	0.4	UG/L
		AIA002EB1	EB	CHLOROETHANE	1	U	1	UG/L
		AIA002EB1	EB	CHLOROFORM	0.3	U	0.3	UG/L
		AIA002EB1	EB	4-CHLORTOLUENE	0.6	U	0.6	UG/L
		AIA002EB1	EB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2	UG/L
		AIA002EB1	EB	NAPHTHALENE	0.4	U	0.4	UG/L
		AIA002EB1	EB	DIBROMOCHLOROMETHANE	0.5	U	0.5	UG/L
		AIA002EB1	EB	DIBROMOMETHANE	2.4	U	2.4	UG/L
		AIA002EB1	EB	DICHLORODIFLUOROMETHANE	1	U	1	UG/L
		AIA002EB1	EB	1,2-DICHLOROBENZENE	0.3	U	0.3	UG/L
		AIA002EB1	EB	HEXACHLOROBUTADIENE	1.1	U	1.1	UG/L
		AIA002EB1	EB	m,p-xylene	1.3	U	1.3	UG/L
		AIA002EB1	EB	METHYLENE CHLORIDE	0.3	U	0.3	UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9802130	SW8260A	AIA002EBI	EB	N-BUTYLBENZENE	1.1	U	1.1	UG/L
		AIA002EBI	EB	N-PROPYLBENZENE	0.4	U	0.4	UG/L
		AIA002EBI	EB	CHLOROMETHANE	1.3	U	1.3	UG/L
		AIA002EBI	EB	1,2,4-TRIMETHYLBENZENE	1.3	U	1.3	UG/L
		AIA002EBI	EB	1,2,3-TRICHLOROPROPANE	3.2	U	3.2	UG/L
		AIA002EBI	EB	1,2,3-TRICHLOROBENZENE	0.3	U	0.3	UG/L
		AIA002EBI	EB	1,1-DICHLOROPROPENE	1	U	1	UG/L
		AIA002EBI	EB	1,1-DICHLOROETHENE	1.2	U	1.2	UG/L
		AIA002EBI	EB	1,1-DICHLOROETHANE	0.4	U	0.4	UG/L
		AIA002EBI	EB	1,1,2-TRICHLOROETHANE	1	U	1	UG/L
		AIA002EBI	EB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4	UG/L
		AIA002EBI	EB	1,1,1-TRICHLOROETHANE	0.8	U	0.8	UG/L
		AIA002EBI	EB	1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5	UG/L
		AIA002EBI	EB	BROMOBENZENE	0.3	U	0.3	UG/L
		AIA002EBI	EB	1,2-DICHLOROPROPANE	0.4	U	0.4	UG/L
		AIA002EBI	EB	BENZENE	0.4	U	0.4	UG/L
		AIA002EBI	EB	1,3,5-TRIMETHYLBENZENE	0.5	U	0.5	UG/L
		AIA002EBI	EB	1,3-DICHLOROBENZENE	1.2	U	1.2	UG/L
		AIA002EBI	EB	1,3-DICHLOROPROPANE	0.4	U	0.4	UG/L
		AIA002EBI	EB	1,4-DICHLOROBENZENE	0.3	U	0.3	UG/L
		AIA002EBI	EB	1-CHLOROHEXANE	0.5	U	0.5	UG/L
		AIA002EBI	EB	2,2-DICHLOROPROPANE	3.5	U	3.5	UG/L
		AIA002EBI	EB	2-CHLOROTOLUENE	0.4	U	0.4	UG/L
		AIA002EBI	EB	ISOPROPYLBENZENE	0.5	U	0.5	UG/L
		AIA002EBI	EB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6	UG/L
		AIA002EBI	EB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4	UG/L
		AIA002EBI	EB	1,2-DICHLOROETHANE	0.6	U	0.6	UG/L
		AIA002EBI	EB	TRICHLOROFLUOROMETHANE	0.8	U	0.8	UG/L
		AIA002EBI	EB	ETHYLBENZENE	0.6	U	0.6	UG/L
		AIA002EBI	EB	VINYL CHLORIDE	1.1	U	1.1	UG/L
		AIA002EBI	EB	TRICHLOROETHENE	1	U	1	UG/L
		AIA002EBI	EB	TRANS-1,3-DICHLOROPROPENE	1	U	1	UG/L
		AIA002EBI	EB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6	UG/L

SDG	Method ID	Field ID	QCType	Analyte	Result	LabFlag	RL Units
9802130	SW8260A	AIA002EB1	EB	TOLUENE	1.1	U	1.1 UGL
		AIA002EB1	EB	TETRACHLOROETHENE	1.4	U	1.4 UGL
		AIA002EB1	EB	TERT-BUTYLBENZENE	1.4	U	1.4 UGL
		AIA002EB1	EB	STYRENE	0.4	U	0.4 UGL
		AIA002EB1	EB	SEC-BUTYLBENZENE	1.3	U	1.3 UGL
		AIA002EB1	EB	P-ISOPROPYL TOLUENE	1.2	U	1.2 UGL
		AIA002EB1	EB	O-XYLENE	1.1	U	1.1 UGL
		LABQC	LB	ETHYLBENZENE	0.6	U	0.6 UGL
		LABQC	LB	m,p-xylene	1.3	U	1.3 UGL
		LABQC	LB	CHLOROETHANE	1	U	1 UGL
		LABQC	LB	N-PROPYLBENZENE	0.4	U	0.4 UGL
		LABQC	LB	BROMOMETHANE	1.1	U	1.1 UGL
		LABQC	LB	TRICHLOROFLUOROMETHANE	0.8	U	0.8 UGL
		LABQC	LB	METHYLENE CHLORIDE	0.75	U	0.75 UGL
		LABQC	LB	CHLOROBENZENE	0.4	U	0.4 UGL
		LABQC	LB	DIBROMOCHLOROMETHANE	0.5	U	0.5 UGL
		LABQC	LB	CHLOROFORM	0.3	U	0.3 UGL
		LABQC	LB	BROMOFORM	1.2	U	1.2 UGL
		LABQC	LB	BROMODICHLOROMETHANE	0.8	U	0.8 UGL
		LABQC	LB	CARBON TETRACHLORIDE	2.1	U	2.1 UGL
		LABQC	LB	VINYL CHLORIDE	1.1	U	1.1 UGL
		LABQC	LB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6 UGL
		LABQC	LB	TRICHLOROETHENE	1	U	1 UGL
		LABQC	LB	N-BUTYLBENZENE	1.1	U	1.1 UGL
		LABQC	LB	TERT-BUTYL BENZENE	1.4	U	1.4 UGL
		LABQC	LB	SEC-BUTYLBENZENE	1.3	U	1.3 UGL
		LABQC	LB	ISOPROPYL BENZENE	0.5	U	0.5 UGL
		LABQC	LB	4-CHLOROTOLUENE	0.6	U	0.6 UGL
		LABQC	LB	2-CHLOROTOLUENE	0.4	U	0.4 UGL
		LABQC	LB	BROMOCHLOROMETHANE	0.4	U	0.4 UGL
		LABQC	LB	STYRENE	0.4	U	0.4 UGL
		LABQC	LB	BENZENE	0.4	U	0.4 UGL
		LABQC	LB	TETRACHLOROETHENE	1.4	U	1.4 UGL

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL Units
9802130	SW8260A	LABQC	LB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2 UGL
	LABQC	LB		1-CHLOROHEXANE	0.5	U	0.5 UGL
	LABQC	LB		DICHLORODIFLUOROMETHANE	1	U	1 UGL
	LABQC	LB		HEXACHLOROBUTADIENE	1.1	U	1.1 UGL
	LABQC	LB		1,4-DICHLOROBENZENE	0.3	U	0.3 UGL
	LABQC	LB		TRANS-1,3-DICHLOROPROPENE	1	U	1 UGL
	LABQC	LB		CIS-1,3-DICHLOROPROPENE	3.5	U	3.5 UGL
	LABQC	LB		2,2-DICHLOROPROPANE	1	U	1 UGL
	LABQC	LB		DIBROMOMETHANE	2.4	U	2.4 UGL
	LABQC	LB		NAPHTHALENE	0.4	U	0.4 UGL
	LABQC	LB		CHLOROMETHANE	1.3	U	1.3 UGL
	LABQC	LB		O-XYLENE	1.1	U	1.1 UGL
	LABQC	LB		BROMOBENZENE	0.3	U	0.3 UGL
	LABQC	LB		P-ISOPROPYLTOULENE	1.2	U	1.2 UGL
	LABQC	LB		TOLUENE	1.1	U	1.1 UGL
	LABQC	LB		1,2,3-TRICHLOROBENZENE	0.3	U	0.3 UGL
	LABQC	LB		1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6 UGL
	LABQC	LB		1,2,4-TRICHLOROBENZENE	0.4	U	0.4 UGL
	LABQC	LB		1,2-DICHLOROPROPANE	0.4	U	0.4 UGL
	LABQC	LB		1,2-DICHLOROETHANE	0.6	U	0.6 UGL
	LABQC	LB		1,2,3-TRICHLOROPROPANE	3.2	U	3.2 UGL
	LABQC	LB		1,1,2-TRICHLOROETHANE	1	U	1 UGL
	LABQC	LB		1,1,1-TRICHLOROETHANE	0.8	U	0.8 UGL
	LABQC	LB		1,1-DICHLOROETHANE	0.4	U	0.4 UGL
	LABQC	LB		1,1-DICHLOROETHENE	1.2	U	1.2 UGL
	LABQC	LB		1,3-DICHLOROPROPANE	0.4	U	0.4 UGL
	LABQC	LB		1,2,4-TRIMETHYLBENZENE	1.3	U	1.3 UGL
	LABQC	LB		1,2-DICHLOROBENZENE	0.3	U	0.3 UGL
	LABQC	LB		1,3,5-TRIMETHYLBENZENE	0.5	U	0.5 UGL
	LABQC	LB		1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4 UGL
	LABQC	LB		1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5 UGL
	LABQC	LB		1,2-DIBROMOETHANE	0.6	U	0.6 UGL
	LABQC	LB		1,3-DICHLOROBENZENE	1.2	U	1.2 UGL

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9802130	SW8260A LABQC	LB		1,1-DICHLOROPROPENE	1	U	1	UG/L
9802151	SW8260A AIA010TB1	TB		HEXACHLOROBUTADIENE	1.1	U	1.1	UG/L
	AIA010TB1	TB		DICHLORODIFLUOROMETHANE	1	U	1	UG/L
	AIA010TB1	TB		DI-BROMOMETHANE	2.4	U	2.4	UG/L
	AIA010TB1	TB		1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6	UG/L
	AIA010TB1	TB		ETHYL BENZENE	0.6	U	0.6	UG/L
	AIA010TB1	TB		1,2,4-TRIMETHYL BENZENE	1.3	U	1.3	UG/L
	AIA010TB1	TB		DI-BROMOCHLOROMETHANE	0.5	U	0.5	UG/L
	AIA010TB1	TB		1,3-DICHLOROPROPANE	0.4	U	0.4	UG/L
	AIA010TB1	TB		CIS-1,3-DICHLOROPROPENE	1	U	1	UG/L
	AIA010TB1	TB		VINYL CHLORIDE	1.1	U	1.1	UG/L
	AIA010TB1	TB		1,2,4-TRICHLOROBENZENE	0.4	U	0.4	UG/L
	AIA010TB1	TB		BROMOBENZENE	0.3	U	0.3	UG/L
	AIA010TB1	TB		BENZENE	0.4	U	0.4	UG/L
	AIA010TB1	TB		1,1-DICHLOROETHENE	1.2	U	1.2	UG/L
	AIA010TB1	TB		BROMOCHLOROMETHANE	0.4	U	0.4	UG/L
	AIA010TB1	TB		1,1-DICHLOROPROPENE	1	U	1	UG/L
	AIA010TB1	TB		BROMOMETHANE	1.1	U	1.1	UG/L
	AIA010TB1	TB		1,2,3-TRICHLOROPROPANE	3.2	U	3.2	UG/L
	AIA010TB1	TB		1,4-DICHLOROBENZENE	0.3	U	0.3	UG/L
	AIA010TB1	TB		BROMODICHLOROMETHANE	0.8	U	0.8	UG/L
	AIA010TB1	TB		BROMOFORM	1.2	U	1.2	UG/L
	AIA010TB1	TB		4-CHLOROTOLUENE	0.6	U	0.6	UG/L
	AIA010TB1	TB		2-CHLOROTOLUENE	0.4	U	0.4	UG/L
	AIA010TB1	TB		2,2-DICHLOROPROPANE	3.5	U	3.5	UG/L
	AIA010TB1	TB		1-CHLOROHEXANE	0.5	U	0.5	UG/L
	AIA010TB1	TB		1,2,3-TRICHLOROBENZENE	0.3	U	0.3	UG/L
	AIA010TB1	TB		O-XYLENE	1.1	U	1.1	UG/L
	AIA010TB1	TB		STYRENE	0.4	U	0.4	UG/L
	AIA010TB1	TB		CHLOROBENZENE	0.4	U	0.4	UG/L
	AIA010TB1	TB		CARBON TETRACHLORIDE	2.1	U	2.1	UG/L
	AIA010TB1	TB		TOLUENE	1.1	U	1.1	UG/L
	AIA010TB1	TB		P-ISOPROPYL TOLUENE	1.2	U	1.2	UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9802151	SW8260A	AIA010TB1	TB	N-PROPYLBENZENE	0.4	U	0.4	UG/L
		AIA010TB1	TB	CHLOROFORM	0.3	U	0.3	UG/L
		AIA010TB1	TB	TRANS-1,3-DICHLOROPROPENE	1	U	1	UG/L
		AIA010TB1	TB	CHLOROMETHANE	1.3	U	1.3	UG/L
		AIA010TB1	TB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6	UG/L
		AIA010TB1	TB	1,2-DIBROMOETHANE	0.6	U	0.6	UG/L
		AIA010TB1	TB	1,2-DICHLOROBENZENE	0.3	U	0.3	UG/L
		AIA010TB1	TB	1,2-DICHLOROETHANE	0.6	U	0.6	UG/L
		AIA010TB1	TB	1,2-DICHLOROPROPANE	0.4	U	0.4	UG/L
		AIA010TB1	TB	1,3,5-TRIMETHYLBENZENE	0.5	U	0.5	UG/L
		AIA010TB1	TB	NAPHTHALENE	0.4	U	0.4	UG/L
		AIA010TB1	TB	SEC-BUTYLBENZENE	1.3	U	1.3	UG/L
		AIA010TB1	TB	1,1,2-TRICHLOROETHANE	1	U	1	UG/L
		AIA010TB1	TB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4	UG/L
		AIA010TB1	TB	1,1,1-TRICHLOROETHANE	0.8	U	0.8	UG/L
		AIA010TB1	TB	TRICHLOROFLUOROMETHANE	0.8	U	0.8	UG/L
		AIA010TB1	TB	TRICHLOROETHENE	1	U	1	UG/L
		AIA010TB1	TB	1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5	UG/L
		AIA010TB1	TB	CHLOROETHANE	1	U	1	UG/L
		AIA010TB1	TB	TERT-BUTYLBENZENE	1.4	U	1.4	UG/L
		AIA010TB1	TB	1,1-DICHLOROETHANE	0.4	U	0.4	UG/L
		AIA010TB1	TB	1,3-DICHLOROBENZENE	1.2	U	1.2	UG/L
		AIA010TB1	TB	ISOPROPYLBENZENE	0.5	U	0.5	UG/L
		AIA010TB1	TB	m,p-xylene	1.3	U	1.3	UG/L
		AIA010TB1	TB	METHYLENE CHLORIDE	0.4	U	0.3	UG/L
		AIA010TB1	TB	N-BUTYLBENZENE	1.1	U	1.1	UG/L
		AIA010TB1	TB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2	UG/L
		AIA010TB1	TB	TETRACHLOROETHENE	1.4	U	1.4	UG/L
		AIA011EB1	EB	1,2-DICHLOROETHANE	0.6	U	0.6	UG/L
		AIA011EB1	EB	ISOPROPYLBENZENE	0.5	U	0.5	UG/L
		AIA011EB1	EB	1,2-DIBROMOETHANE	0.6	U	0.6	UG/L
		AIA011EB1	EB	TERT-BUTYLBENZENE	1.4	U	1.4	UG/L
		AIA011EB1	EB	STYRENE	0.4	U	0.4	UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL Units
9802151	SW8260A	AIA01EB1	EB	SEC-BUTYLBENZENE	1.3	U	1.3 UGL
		AIA01EB1	EB	BENZENE	0.4	U	0.4 UGL
		AIA01EB1	EB	BROMOBENZENE	0.3	U	0.3 UGL
		AIA01EB1	EB	BROMOCHLOROMETHANE	0.4	U	0.4 UGL
		AIA01EB1	EB	BROMODICHLOROMETHANE	0.8	U	0.8 UGL
		AIA01EB1	EB	BROMOFORM	1.2	U	1.2 UGL
		AIA01EB1	EB	P-ISOPROPYLTOLUENE	1.2	U	1.2 UGL
		AIA01EB1	EB	O-XYLENE	1.1	U	1.1 UGL
		AIA01EB1	EB	NAPHTHALENE	0.4	U	0.4 UGL
		AIA01EB1	EB	TOLUENE	1.1	U	1.1 UGL
		AIA01EB1	EB	m,p-xylene	1.3	U	1.3 UGL
		AIA01EB1	EB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6 UGL
		AIA01EB1	EB	BROMOMETHANE	1.1	U	1.1 UGL
		AIA01EB1	EB	HEXACHLOROBUTADIENE	1.1	U	1.1 UGL
		AIA01EB1	EB	ETHYLBENZENE	0.6	U	0.6 UGL
		AIA01EB1	EB	DICHLORODIFLUOROMETHANE	1	U	1 UGL
		AIA01EB1	EB	DIBROMOMETHANE	2.4	U	2.4 UGL
		AIA01EB1	EB	DIBROMOCHLOROMETHANE	0.5	U	0.5 UGL
		AIA01EB1	EB	CIS-1,3-DICHLOROPROPENE	1	U	1 UGL
		AIA01EB1	EB	CARBON TETRACHLORIDE	2.1	U	2.1 UGL
		AIA01EB1	EB	CHLOROBENZENE	0.4	U	0.4 UGL
		AIA01EB1	EB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2 UGL
		AIA01EB1	EB	CHLOROMETHANE	1.3	U	1.3 UGL
		AIA01EB1	EB	CHLOROFORM	0.3	U	0.3 UGL
		AIA01EB1	EB	N-BUTYLBENZENE	1.1	U	1.1 UGL
		AIA01EB1	EB	1,2-DICHLOROPROpane	0.4	U	0.4 UGL
		AIA01EB1	EB	1,1,1-TRICHLOROETHANE	0.8	U	0.8 UGL
		AIA01EB1	EB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4 UGL
		AIA01EB1	EB	1,1,2-TRICHLOROETHANE	1	U	1 UGL
		AIA01EB1	EB	1,1-DICHLOROETHANE	0.4	U	0.4 UGL
		AIA01EB1	EB	1,1-DICHLOROETHENE	1.2	U	1.2 UGL
		AIA01EB1	EB	METHYLENE CHLORIDE	0.3	U	0.3 UGL
		AIA01EB1	EB	1,1-DICHLOROPROPENE	1	U	1 UGL

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL Units
9802151	SW8260A	AIA011EB1	EB	1,2,3-TRICHLOROBENZENE	0.3	U	0.3 UGL
		AIA011EB1	EB	1,2,3-TRICHLOROPROPANE	3.2	U	3.2 UGL
		AIA011EB1	EB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4 UGL
		AIA011EB1	EB	1,2,4-TRIMETHYLBENZENE	1.3	U	1.3 UGL
		AIA011EB1	EB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6 UGL
		AIA011EB1	EB	TETRACHLOROETHENE	1.4	U	1.4 UGL
		AIA011EB1	EB	CHLOROETHANE	1	U	1 UGL
		AIA011EB1	EB	1,1,2,2-TETRACHLOROETHANE	0.5	U	0.5 UGL
		AIA011EB1	EB	1,3,5-TRIMETHYLBENZENE	0.5	U	0.5 UGL
		AIA011EB1	EB	1,3-DICHLOROBENZENE	1.2	U	1.2 UGL
		AIA011EB1	EB	1,3-DICHLOROPROPANE	0.4	U	0.4 UGL
		AIA011EB1	EB	1,4-DICHLOROBENZENE	0.3	U	0.3 UGL
		AIA011EB1	EB	1-CHLOROHEXANE	0.5	U	0.5 UGL
		AIA011EB1	EB	2,2-DICHLOROPROPANE	3.5	U	3.5 UGL
		AIA011EB1	EB	VINYL CHLORIDE	1.1	U	1.1 UGL
		AIA011EB1	EB	TRICHLOROFLUOROMETHANE	0.8	U	0.8 UGL
		AIA011EB1	EB	TRICHLOROETHENE	1	U	1 UGL
		AIA011EB1	EB	TRANS-1,3-DICHLOROPROPENE	1	U	1 UGL
		AIA011EB1	EB	2-CHLOROTOLUENE	0.4	U	0.4 UGL
		AIA011EB1	EB	4-CHLORTOLUENE	0.6	U	0.6 UGL
		AIA011EB1	EB	1,2-DICHLOROBENZENE	0.3	U	0.3 UGL
		AIA011EB1	EB	N-PROPYLBENZENE	0.4	U	0.4 UGL
		AIA012AB1	AB	CHLOROMETHANE	1.3	U	1.3 UGL
		AIA012AB1	AB	ISOPROPYLBENZENE	0.5	U	0.5 UGL
		AIA012AB1	AB	HEXACHLOROBUTADIENE	1.1	U	1.1 UGL
		AIA012AB1	AB	ETHYLBENZENE	0.6	U	0.6 UGL
		AIA012AB1	AB	DICHLORODIFLUOROMETHANE	1	U	1 UGL
		AIA012AB1	AB	DIBROMOMETHANE	2.4	U	2.4 UGL
		AIA012AB1	AB	DIBROMOCHLOROMETHANE	0.5	U	0.5 UGL
		AIA012AB1	AB	1,1,2-TRICHLOROETHANE	1	U	1 UGL
		AIA012AB1	AB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2 UGL
		AIA012AB1	AB	N-BUTYLBENZENE	1.1	U	1.1 UGL
		AIA012AB1	AB	CHLOROFORM	0.3	U	0.3 UGL

SDG	Method ID	Field ID	QCType	Analyte	Result LabFlag	Rt	Units
9802151	SW8260A	AIA012AB1	AB	TOLUENE	1	U	UGL
		AIA012AB1	AB	CHLOROBENZENE	0.4	U	0.4 UGL
		AIA012AB1	AB	1,1,1-TRICHLOROETHANE	0.8	U	0.8 UGL
		AIA012AB1	AB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4 UGL
		AIA012AB1	AB	CIS-1,3-DICHLOROPROPENE	1	U	1 UGL
		AIA012AB1	AB	STYRENE	0.4	U	0.4 UGL
		AIA012AB1	AB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6 UGL
		AIA012AB1	AB	TRANS-1,3-DICHLOROPROPENE	1	U	1 UGL
		AIA012AB1	AB	TRICHLOROETHENE	1	U	1 UGL
		AIA012AB1	AB	TRICHLOROFLUOROMETHANE	0.8	U	0.8 UGL
		AIA012AB1	AB	VINYL CHLORIDE	1.1	U	1.1 UGL
		AIA012AB1	AB	TETRACHLOROETHENE	1.4	U	1.4 UGL
		AIA012AB1	AB	m,p-xylene	1.3	U	1.3 UGL
		AIA012AB1	AB	CARBON TETRACHLORIDE	2.1	U	2.1 UGL
		AIA012AB1	AB	METHYLENE CHLORIDE	0.3	U	0.3 UGL
		AIA012AB1	AB	SEC-BUTYL BENZENE	1.3	U	1.3 UGL
		AIA012AB1	AB	P-ISOPROPYL TOLUENE	1.2	U	1.2 UGL
		AIA012AB1	AB	OXYLENE	1.1	U	1.1 UGL
		AIA012AB1	AB	NAPHTHALENE	0.4	U	0.4 UGL
		AIA012AB1	AB	N-PROPYLBENZENE	0.4	U	0.4 UGL
		AIA012AB1	AB	1,1,2-TETRACHLOROETHANE	0.5	U	0.5 UGL
		AIA012AB1	AB	TERT-BUTYL BENZENE	1.4	U	1.4 UGL
		AIA012AB1	AB	2-CHLOROTOLUENE	0.4	U	0.4 UGL
		AIA012AB1	AB	1,2-DICHLOROPROpane	0.4	U	0.4 UGL
		AIA012AB1	AB	1,1-DICHLOROETHANE	0.4	U	0.4 UGL
		AIA012AB1	AB	1,3-DICHLOROBENZENE	1.2	U	1.2 UGL
		AIA012AB1	AB	CHLOROETHANE	1	U	1 UGL
		AIA012AB1	AB	1,3-DICHLOROPROPANE	0.4	U	0.4 UGL
		AIA012AB1	AB	1,4-DICHLOROBENZENE	0.3	U	0.3 UGL
		AIA012AB1	AB	1,2-DICHLOROETHANE	0.6	U	0.6 UGL
		AIA012AB1	AB	2,2-DICHLOROPROPANE	3.5	U	3.5 UGL
		AIA012AB1	AB	1,3,5-TRIMETHYLBENZENE	0.5	U	0.5 UGL
		AIA012AB1	AB	4-CHLOROTOLUENE	0.6	U	0.6 UGL

SDG	Method Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9802151	SW8260A	AIA012AB1	BENZENE	0.4	U	0.4	UG/L
		AIA012AB1	BROMOBENZENE	0.3	U	0.3	UG/L
		AIA012AB1	BROMOCHLOROMETHANE	0.4	U	0.4	UG/L
		AIA012AB1	BROMODICHLOROMETHANE	0.8	U	0.8	UG/L
		AIA012AB1	BROMOFORM	1.2	U	1.2	UG/L
		AIA012AB1	BROMOMETHANE	1.1	U	1.1	UG/L
		AIA012AB1	1-CHLOROHEXANE	0.5	U	0.5	UG/L
		AIA012AB1	1,2,4-TRIMETHYLBENZENE	1.3	U	1.3	UG/L
		AIA012AB1	1,2-DICHLOROBENZENE	0.3	U	0.3	UG/L
		AIA012AB1	1,2,3-TRICHLOROPROPANE	3.2	U	3.2	UG/L
		AIA012AB1	1,1-DICHLOROPROPENE	1	U	1	UG/L
		AIA012AB1	1,2,4-TRICHLOROBENZENE	0.4	U	0.4	UG/L
		AIA012AB1	1,2,3-TRICHLOROBENZENE	0.3	U	0.3	UG/L
		AIA012AB1	1,1-DICHLOROETHENE	1.2	U	1.2	UG/L
		AIA012AB1	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6	UG/L
		AIA012AB1	1,2-DIBROMOETHANE	0.6	U	0.6	UG/L
	LABQC	LB	DICHLORODIFLUOROMETHANE	1	U	1	UG/L
	LABQC	LB	DIBROMOCHLOROMETHANE	0.5	U	0.5	UG/L
	LABQC	LB	BROMOCHLOROMETHANE	0.4	U	0.4	UG/L
	LABQC	LB	1-CHLOROHEXANE	0.5	U	0.5	UG/L
	LABQC	LB	ETHYLBENZENE	0.6	U	0.6	UG/L
	LABQC	LB	TERT-BUTYLBENZENE	1.4	U	1.4	UG/L
	LABQC	LB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6	UG/L
	LABQC	LB	METHYLENECHLORIDE	0.75		0.3	UG/L
	LABQC	LB	BROMOBENZENE	0.3	U	0.3	UG/L
	LABQC	LB	TETRACHLOROETHENE	1.4	U	1.4	UG/L
	LABQC	LB	1,4-DICHLOROBENZENE	0.3	U	0.3	UG/L
	LABQC	LB	CHLOROBENZENE	0.4	U	0.4	UG/L
	LABQC	LB	METHYLENECHLORIDE	1.6		0.3	UG/L
	LABQC	LB	TOLUENE	1.1	U	1.1	UG/L
	LABQC	LB	O-XYLENE	1.1	U	1.1	UG/L
	LABQC	LB	P-ISOPROPYLTOLUENE	1.2	U	1.2	UG/L
	LABQC	LB	BROMOFORM	1.2	U	1.2	UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9802151	SW8260A	LABQC	LB	4-CHLOROTOLUENE	0.6	U	0.6	UG/L
	LABQC	LB		DIROMOMETHANE	2.4	U	2.4	UG/L
	LABQC	LB		SEC-BUTYLBENZENE	1.3	U	1.3	UG/L
	LABQC	LB		N-PROPYLBENZENE	0.4	U	0.4	UG/L
	LABQC	LB		VINYL CHLORIDE	1.1	U	1.1	UG/L
	LABQC	LB		NAPHTHALENE	0.4	U	0.4	UG/L
	LABQC	LB		TRICHLOROETHENE	1	U	1	UG/L
	LABQC	LB		BROMOMETHANE	1.1	U	1.1	UG/L
	LABQC	LB		N-BUTYLBENZENE	1.1	U	1.1	UG/L
	LABQC	LB		STYRENE	0.4	U	0.4	UG/L
	LABQC	LB		2,2-DICHLOROPROPANE	3.5	U	3.5	UG/L
	LABQC	LB		BROMODICHLOROMETHANE	0.8	U	0.8	UG/L
	LABQC	LB		BENZENE	0.4	U	0.4	UG/L
	LABQC	LB		CARBON TETRACHLORIDE	2.1	U	2.1	UG/L
	LABQC	LB		2-CHLOROTOLUENE	0.4	U	0.4	UG/L
	LABQC	LB		TRANS-1,3-DICHLOROPROPENE	1	U	1	UG/L
	LABQC	LB		CIS-1,3-DICHLOROPROPENE	1	U	1	UG/L
	LABQC	LB		TRICHLOROFLUOROMETHANE	0.8	U	0.8	UG/L
	LABQC	LB		CHLOROFORM	0.3	U	0.3	UG/L
	LABQC	LB		CIS-1,2-DICHLOROETHENE	1.2	U	1.2	UG/L
	LABQC	LB		CHLOROETHANE	1	U	1	UG/L
	LABQC	LB		CHLOROMETHANE	1.3	U	1.3	UG/L
	LABQC	LB		m,p-xylene	1.3	U	1.3	UG/L
	LABQC	LB		ISOPROPYLBENZENE	0.5	U	0.5	UG/L
	LABQC	LB		HEXACHLOROBUTADIENE	1.1	U	1.1	UG/L
	LABQC	LB		1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4	UG/L
	LABQC	LB		1,1-DICHLOROPROPENE	1	U	1	UG/L
	LABQC	LB		1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5	UG/L
	LABQC	LB		1,2-DICHLOROBENZENE	0.3	U	0.3	UG/L
	LABQC	LB		1,3-DICHLOROPROPANE	0.4	U	0.4	UG/L
	LABQC	LB		1,2-DIBROMOETHANE	0.6	U	0.6	UG/L
	LABQC	LB		1,1-DICHLOROETHENE	1.2	U	1.2	UG/L
	LABQC	LB		1,1,1-TRICHLOROETHANE	0.8	U	0.8	UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL Units
9802151	SW8260A	LABQC	LB	1,2-DICHLOROETHANE	0.6	U	0.6 UGL
		LABQC	LB	1,1,2-TRICHLOROETHANE	1	U	1 UGL
		LABQC	LB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6 UGL
		LABQC	LB	1,3-DICHLOROBENZENE	1.2	U	1.2 UGL
		LABQC	LB	1,2-DICHLOROPROPANE	0.4	U	0.4 UGL
		LABQC	LB	1,2,4-TRIMETHYLBENZENE	1.3	U	1.3 UGL
		LABQC	LB	1,2,3-TRICHLOROPROPANE	3.2	U	3.2 UGL
		LABQC	LB	1,1-DICHLOROETHANE	0.4	U	0.4 UGL
		LABQC	LB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4 UGL
		LABQC	LB	1,3,5-TRIMETHYLBENZENE	0.5	U	0.5 UGL
		LABQC	LB	1,2,3-TRICHLOROBENZENE	0.3	U	0.3 UGL
		AIA022TB1	TB	1,1-DICHLOROETHANE	0.4	U	0.4 UGL
		AIA022TB1	TB	NAPHTHALENE	0.4	U	0.4 UGL
		AIA022TB1	TB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4 UGL
9802159	SW8260A	AIA022TB1	TB	CHLOROMETHANE	1.3	U	1.3 UGL
		AIA022TB1	TB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2 UGL
		AIA022TB1	TB	CIS-1,3-DICHLOROPROPENE	1	U	1 UGL
		AIA022TB1	TB	DIBROMOCHLOROMETHANE	0.5	U	0.5 UGL
		AIA022TB1	TB	DIBROMOMETHANE	2.4	U	2.4 UGL
		AIA022TB1	TB	DICHLORODIFLUOROMETHANE	1	U	1 UGL
		AIA022TB1	TB	ETHYL BENZENE	0.6	U	0.6 UGL
		AIA022TB1	TB	HEXACHLOROBUTADIENE	1.1	U	1.1 UGL
		AIA022TB1	TB	ISOPROPYL BENZENE	0.5	U	0.5 UGL
		AIA022TB1	TB	m,p-xylene	1.3	U	1.3 UGL
		AIA022TB1	TB	METHYLENE CHLORIDE	0.6	U	0.3 UGL
		AIA022TB1	TB	CHLOROETHANE	1	U	1 UGL
		AIA022TB1	TB	N-PROPYLBENZENE	0.4	U	0.4 UGL
		AIA022TB1	TB	CHLOROBENZENE	0.4	U	0.4 UGL
		AIA022TB1	TB	O-XYLENE	1.1	U	1.1 UGL
		AIA022TB1	TB	P-ISOPROPYL TOLUENE	1.2	U	1.2 UGL
		AIA022TB1	TB	SEC-BUTYL BENZENE	1.3	U	1.3 UGL
		AIA022TB1	TB	STYRENE	0.4	U	0.4 UGL
		AIA022TB1	TB	TERT-BUTYL BENZENE	1.4	U	1.4 UGL

SDG	Method ID	Field ID	QCType	Analyte	Result	LabFlag	RL Units
9802159	SW8260A	AIA022TB1	TB	TETRACHLOROETHENE	1.4	U	1.4 UGL
	AIA022TB1	TB		TOLUENE	1.1	U	1.1 UGL
	AIA022TB1	TB		TRANS-1,2-DICHLOROETHENE	0.6	U	0.6 UGL
	AIA022TB1	TB		TRANS-1,3-DICHLOROPROPENE	1	U	1 UGL
	AIA022TB1	TB		TRICHLOROETHENE	1	U	1 UGL
	AIA022TB1	TB		TRICHLOROFLUOROMETHANE	0.8	U	0.8 UGL
	AIA022TB1	TB		VINYL CHLORIDE	1.1	U	1.1 UGL
	AIA022TB1	TB		N-BUTYLBENZENE	1.1	U	1.1 UGL
	AIA022TB1	TB		1,3,5-TRIMETHYLBENZENE	0.5	U	0.5 UGL
	AIA022TB1	TB		1,1,1-TRICHLOROETHANE	0.8	U	0.8 UGL
	AIA022TB1	TB		1,1,2-TRICHLOROETHANE	1	U	1 UGL
	AIA022TB1	TB		BROMOFORM	1.2	U	1.2 UGL
	AIA022TB1	TB		1,1-DICHLOROETHENE	1.2	U	1.2 UGL
	AIA022TB1	TB		1,1-DICHLOROPROPENE	1	U	1 UGL
	AIA022TB1	TB		1,2,3-TRICHLOROBENZENE	0.3	U	0.3 UGL
	AIA022TB1	TB		1,2,3-TRICHLOROPROPANE	3.2	U	3.2 UGL
	AIA022TB1	TB		1,2,4-TRICHLOROBENZENE	0.4	U	0.4 UGL
	AIA022TB1	TB		1,2,4-TRIMETHYLBENZENE	1.3	U	1.3 UGL
	AIA022TB1	TB		1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6 UGL
	AIA022TB1	TB		1,2-DIBROMOETHANE	0.6	U	0.6 UGL
	AIA022TB1	TB		1,2-DICHLOROBENZENE	0.3	U	0.3 UGL
	AIA022TB1	TB		CHLOROFORM	0.3	U	0.3 UGL
	AIA022TB1	TB		1,2-DICHLOROPROPANE	0.4	U	0.4 UGL
	AIA022TB1	TB		1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5 UGL
	AIA022TB1	TB		1,3-DICHLOROBENZENE	1.2	U	1.2 UGL
	AIA022TB1	TB		1,3-DICHLOROPROPANE	0.4	U	0.4 UGL
	AIA022TB1	TB		1,4-DICHLOROBENZENE	0.3	U	0.3 UGL
	AIA022TB1	TB		1-CHLOROHEXANE	0.5	U	0.5 UGL
	AIA022TB1	TB		2,2-DICHLOROPROPANE	3.5	U	3.5 UGL
	AIA022TB1	TB		2-CHLOROTOLUENE	0.4	U	0.4 UGL
	AIA022TB1	TB		4-CHLOROTOLUENE	0.6	U	0.6 UGL
	AIA022TB1	TB		BENZENE	0.4	U	0.4 UGL
	AIA022TB1	TB		BROMOBENZENE	0.3	U	0.3 UGL

SDG	Method Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9802159	SW8260A	AIA022TB1	BROMOCHLOROMETHANE	0.4	U	0.4	UG/L
		AIA022TB1	BROMODICHLOROMETHANE	0.8	U	0.8	UG/L
		AIA022TB1	BROMOMETHANE	1.1	U	1.1	UG/L
		AIA022TB1	1,2-DICHLOROETHANE	0.6	U	0.6	UG/L
		AIA022TB1	CARBON TETRACHLORIDE	2.1	U	2.1	UG/L
		AIA023EB1	1,2-DICHLOROETHANE	0.6	U	0.6	UG/L
		AIA023EB1	BROMODICHLOROMETHANE	0.8	U	0.8	UG/L
		AIA023EB1	BROMOCHLOROMETHANE	0.4	U	0.4	UG/L
		AIA023EB1	BROMOBENZENE	0.3	U	0.3	UG/L
		AIA023EB1	BENZENE	0.4	U	0.4	UG/L
		AIA023EB1	4-CHLOROTOLUENE	0.6	U	0.6	UG/L
		AIA023EB1	2-CHLOROTOLUENE	0.4	U	0.4	UG/L
		AIA023EB1	2,2-DICHLOROPROpane	3.5	U	3.5	UG/L
		AIA023EB1	1-CHLOROHEXANE	0.5	U	0.5	UG/L
		AIA023EB1	1,4-DICHLOROBENZENE	0.3	U	0.3	UG/L
		AIA023EB1	1,3-DICHLOROPROPANE	0.4	U	0.4	UG/L
		AIA023EB1	1,3-DICHLOROBENZENE	1.2	U	1.2	UG/L
		AIA023EB1	1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5	UG/L
		AIA023EB1	1,2-DICHLOROPROPANE	0.4	U	0.4	UG/L
		AIA023EB1	CARBON TETRACHLORIDE	2.1	U	2.1	UG/L
		AIA023EB1	1,2-DICHLOROBENZENE	0.3	U	0.3	UG/L
		AIA023EB1	1,2-DIBROMOETHANE	0.6	U	0.6	UG/L
		AIA023EB1	1,2,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6	UG/L
		AIA023EB1	1,2,4-TRIMETHYLBENZENE	1.3	U	1.3	UG/L
		AIA023EB1	1,2,4-TRICHLOROBENZENE	0.4	U	0.4	UG/L
		AIA023EB1	1,2,3-TRICHLOROPROPANE	3.2	U	3.2	UG/L
		AIA023EB1	1,2,3-TRICHLOROBENZENE	0.3	U	0.3	UG/L
		AIA023EB1	1,1-DICHLOROPROPENE	1	U	1	UG/L
		AIA023EB1	1,1-DICHLOROETHENE	1.2	U	1.2	UG/L
		AIA023EB1	1,1-DICHLOROETHANE	0.4	U	0.4	UG/L
		AIA023EB1	1,1,2-TRICHLOROETHANE	1	U	1	UG/L
		AIA023EB1	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4	UG/L
		AIA023EB1	1,1,1-TRICHLOROETHANE	0.8	U	0.8	UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9802159	SW8260A	AIA023EB1	EB	1,3,5-TRIMETHYLBENZENE	0.5	U	0.5	UG/L
		AIA023EB1	EB	N-BUTYLBENZENE	1.1	U	1.1	UG/L
		AIA023EB1	EB	VINYL CHLORIDE	1.1	U	1.1	UG/L
		AIA023EB1	EB	TRICHLOROFLUOROMETHANE	0.8	U	0.8	UG/L
		AIA023EB1	EB	TRICHLOROETHENE	1	U	1	UG/L
		AIA023EB1	EB	TRANS-1,3-DICHLOROPROPENE	1	U	1	UG/L
		AIA023EB1	EB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6	UG/L
		AIA023EB1	EB	TOLUENE	1.1	U	1.1	UG/L
		AIA023EB1	EB	TETRACHLOROETHENE	1.4	U	1.4	UG/L
		AIA023EB1	EB	TERT-BUTYLBENZENE	1.4	U	1.4	UG/L
		AIA023EB1	EB	STYRENE	0.4	U	0.4	UG/L
		AIA023EB1	EB	SEC-BUTYLBENZENE	1.3	U	1.3	UG/L
		AIA023EB1	EB	P-ISOPROPYL TOLUENE	1.2	U	1.2	UG/L
		AIA023EB1	EB	O-XYLENE	1.1	U	1.1	UG/L
		AIA023EB1	EB	BROMOFORM	1.2	U	1.2	UG/L
		AIA023EB1	EB	N-PROPYLBENZENE	0.4	U	0.4	UG/L
		AIA023EB1	EB	BROMOMETHANE	1.1	U	1.1	UG/L
		AIA023EB1	EB	METHYLENE CHLORIDE	0.3	U	0.3	UG/L
		AIA023EB1	EB	m,p-xylene	1.3	U	1.3	UG/L
		AIA023EB1	EB	ISOPROPYL BENZENE	0.5	U	0.5	UG/L
		AIA023EB1	EB	HEXACHLOROBUTADIENE	1.1	U	1.1	UG/L
		AIA023EB1	EB	ETHYL BENZENE	0.6	U	0.6	UG/L
		AIA023EB1	EB	DICHLORODIFLUOROMETHANE	1	U	1	UG/L
		AIA023EB1	EB	DBROMOMETHANE	2.4	U	2.4	UG/L
		AIA023EB1	EB	CIS-1,3-DICHLOROPROPENE	1	U	1	UG/L
		AIA023EB1	EB	CHLOROMETHANE	1.3	U	1.3	UG/L
		AIA023EB1	EB	CHLOROFORM	0.3	U	0.3	UG/L
		AIA023EB1	EB	CHLOROETHANE	1	U	1	UG/L
		AIA023EB1	EB	CHLOROBENZENE	0.4	U	0.4	UG/L
		AIA023EB1	EB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2	UG/L
		AIA023EB1	EB	NAPHTHALENE	0.4	U	0.4	UG/L
		AIA023EB1	EB	DBROMOCHLOROMETHANE	0.5	U	0.5	UG/L
	LABQC	LB		CARBON TETRACHLORIDE	2.1	U	2.1	UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL Units
9802159	SW8260A	LABQC	LB	TETRACHLOROETHENE	1.4	U	1.4 UGL
		LABQC	LB	BROMOBENZENE	0.3	U	0.3 UGL
		LABQC	LB	N-BUTYL BENZENE	1	U	1.1 UGL
		LABQC	LB	N-PROPYLBENZENE	0.4	U	0.4 UGL
		LABQC	LB	4-CHLOROTOLUENE	0.6	U	0.6 UGL
		LABQC	LB	DICHLORODIFLUOROMETHANE	1	U	1 UGL
		LABQC	LB	O-XYLENE	1.1	U	1.1 UGL
		LABQC	LB	2-CHLOROTOLUENE	0.4	U	0.4 UGL
		LABQC	LB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6 UGL
		LABQC	LB	BENZENE	0.4	U	0.4 UGL
		LABQC	LB	CHLOROFORM	0.3	U	0.3 UGL
		LABQC	LB	m,p-xylene	1.3	U	1.3 UGL
		LABQC	LB	CHLOROMETHANE	1.3	U	1.3 UGL
		LABQC	LB	DIBROMOCHLOROMETHANE	0.5	U	0.5 UGL
		LABQC	LB	TRICHLOROETHENE	1	U	1 UGL
		LABQC	LB	DIBROMOMETHANE	2.4	U	2.4 UGL
		LABQC	LB	VINYL CHLORIDE	1.1	U	1.1 UGL
		LABQC	LB	STYRENE	0.4	U	0.4 UGL
		LABQC	LB	P-ISOPROPYL TOLUENE	1.2	U	1.2 UGL
		LABQC	LB	BROMOMETHANE	1.1	U	1.1 UGL
		LABQC	LB	2,2-DICHLOROPROpane	3.5	U	3.5 UGL
		LABQC	LB	ETHYL BENZENE	0.6	U	0.6 UGL
		LABQC	LB	CIS-1,3-DICHLOROPROPENE	1	U	1 UGL
		LABQC	LB	1,4-DICHLOROBENZENE	0.3	U	0.3 UGL
		LABQC	LB	BROMODICHLOROMETHANE	0.8	U	0.8 UGL
		LABQC	LB	NAPHTHALENE	0.4	U	0.4 UGL
		LABQC	LB	CHLOROETHANE	1	U	1 UGL
		LABQC	LB	SEC-BUTYL BENZENE	1.3	U	1.3 UGL
		LABQC	LB	METHYLENE CHLORIDE	0.58	U	0.3 UGL
		LABQC	LB	1-CHLOROHEXANE	0.5	U	0.5 UGL
		LABQC	LB	TRICHLOROFLUOROMETHANE	0.8	U	0.8 UGL
		LABQC	LB	BROMOFORM	1.2	U	1.2 UGL
		LABQC	LB	TOLUENE	1.1	U	1.1 UGL

SDG	Method Field ID	QCType	Analyte	Result	LabFlag	RL Units
9802159	SW8260A LABQC	LB	TERT-BUTYLBENZENE	1.4	U	1.4 UGL
	LABQC	LB	BROMOCHLOROMETHANE	0.4	U	0.4 UGL
	LABQC	LB	HEXACHLOROBUTADIENE	1.1	U	1.1 UGL
	LABQC	LB	TRANS-1,3-DICHLOROPROPENE	1	U	1 UGL
	LABQC	LB	ISOPROPYLBENZENE	0.5	U	0.5 UGL
	LABQC	LB	CHLOROBENZENE	0.4	U	0.4 UGL
	LABQC	LB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2 UGL
	LABQC	LB	1,2-DIBROMOETHANE	0.6	U	0.6 UGL
	LABQC	LB	1,2,3-TRICHLOROPROPANE	3.2	U	3.2 UGL
	LABQC	LB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4 UGL
	LABQC	LB	1,2-DICHLOROPROPANE	0.4	U	0.4 UGL
	LABQC	LB	1,2,3-TRICHLOROBENZENE	0.3	U	0.3 UGL
	LABQC	LB	1,2,4-TRIMETHYLBENZENE	1.3	U	1.3 UGL
	LABQC	LB	1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5 UGL
	LABQC	LB	1,1,1-TRICHLOROETHANE	0.8	U	0.8 UGL
	LABQC	LB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6 UGL
	LABQC	LB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4 UGL
	LABQC	LB	1,1,2-TRICHLOROETHANE	1	U	1 UGL
	LABQC	LB	1,2-DICHLOROBENZENE	0.3	U	0.3 UGL
	LABQC	LB	1,3-DICHLOROBENZENE	1.2	U	1.2 UGL
	LABQC	LB	1,1-DICHLOROETHANE	0.4	U	0.4 UGL
	LABQC	LB	1,1-DICHLOROPROPENE	1	U	1 UGL
	LABQC	LB	1,3-DICHLOROPROPANE	0.4	U	0.4 UGL
	LABQC	LB	1,3,5-TRIMETHYLBENZENE	0.5	U	0.5 UGL
	LABQC	LB	1,1-DICHLOROETHENE	1.2	U	1.2 UGL
	LABQC	LB	1,2-DICHLOROETHANE	0.6	U	0.6 UGL
9802168	SW8260A AIA027TB1	TB	1,1,1-TRICHLOROETHANE	0.8	U	0.8 UGL
	AIA027TB1	TB	1,3-DICHLOROPROPANE	0.4	U	0.4 UGL
	AIA027TB1	TB	1,4-DICHLOROBENZENE	0.3	U	0.3 UGL
	AIA027TB1	TB	1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5 UGL
	AIA027TB1	TB	1,2-DIBROMOETHANE	0.6	U	0.6 UGL
	AIA027TB1	TB	2,2-DICHLOROPROPANE	3.5	U	3.5 UGL
	AIA027TB1	TB	2-CHLOROTOLUENE	0.4	U	0.4 UGL

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9802168	SW8260A	AIA027TB1	TB	4-CHLORTOLUENE	0.6	U	0.6	UG/L
		AIA027TB1	TB	BENZENE	0.4	U	0.4	UG/L
		AIA027TB1	TB	1-CHLOROHEXANE	0.5	U	0.5	UG/L
		AIA027TB1	TB	1,3,5-TRIMETHYLBENZENE	0.5	U	0.5	UG/L
		AIA027TB1	TB	1,2-DICHLOROPROPANE	0.4	U	0.4	UG/L
		AIA027TB1	TB	1,2-DICHLOROETHANE	0.6	U	0.6	UG/L
		AIA027TB1	TB	1,2-DICHLOROBENZENE	0.3	U	0.3	UG/L
		AIA027TB1	TB	BROMOBENZENE	0.3	U	0.3	UG/L
		AIA027TB1	TB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4	UG/L
		AIA027TB1	TB	CHLOROBENZENE	0.4	U	0.4	UG/L
		AIA027TB1	TB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6	UG/L
		AIA027TB1	TB	1,2,4-TRIMETHYLBENZENE	1.3	U	1.3	UG/L
		AIA027TB1	TB	1,1,2-TRICHLOROETHANE	1	U	1	UG/L
		AIA027TB1	TB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4	UG/L
		AIA027TB1	TB	1,2,3-TRICHLOROPROPANE	3.2	U	3.2	UG/L
		AIA027TB1	TB	1,1-DICHLOROETHANE	0.4	U	0.4	UG/L
		AIA027TB1	TB	1,1-DICHLOROPROPENE	1	U	1	UG/L
		AIA027TB1	TB	1,3-DICHLOROBENZENE	1.2	U	1.2	UG/L
		AIA027TB1	TB	TETRACHLOROETHENE	1.4	U	1.4	UG/L
		AIA027TB1	TB	BROMOMETHANE	1.1	U	1.1	UG/L
		AIA027TB1	TB	N-PROPYLBENZENE	0.4	U	0.4	UG/L
		AIA027TB1	TB	NAPHTHALENE	0.4	U	0.4	UG/L
		AIA027TB1	TB	O-XYLENE	1.1	U	1.1	UG/L
		AIA027TB1	TB	P-ISOPROPYL TOLUENE	1.2	U	1.2	UG/L
		AIA027TB1	TB	SEC-BUTYL BENZENE	1.3	U	1.3	UG/L
		AIA027TB1	TB	METHYLENE CHLORIDE	0.72	U	0.3	UG/L
		AIA027TB1	TB	TERT-BUTYL BENZENE	1.4	U	1.4	UG/L
		AIA027TB1	TB	m,p-xylene	1.3	U	1.3	UG/L
		AIA027TB1	TB	TOLUENE	1.1	U	1.1	UG/L
		AIA027TB1	TB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6	UG/L
		AIA027TB1	TB	TRANS-1,3-DICHLOROPROPENE	1	U	1	UG/L
		AIA027TB1	TB	TRICHLOROETHENE	1	U	1	UG/L
		AIA027TB1	TB	TRICHLOROFLUOROMETHANE	0.8	U	0.8	UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL Units
9802168	SW8260A	AIA027TB1	TB	VINYL CHLORIDE	1.1	U	1.1 UGL
		AIA027TB1	TB	STYRENE	0.4	U	0.4 UGL
		AIA027TB1	TB	CIS-1,3-DICHLOROPROPENE	1	U	1 UGL
		AIA027TB1	TB	BROMODICHLOROMETHANE	0.8	U	0.8 UGL
		AIA027TB1	TB	BROMOFORM	1.2	U	1.2 UGL
		AIA027TB1	TB	CARBON TETRACHLORIDE	2.1	U	2.1 UGL
		AIA027TB1	TB	1,1-DICHLOROETHENE	1.2	U	1.2 UGL
		AIA027TB1	TB	CHLOROETHANE	1	U	1 UGL
		AIA027TB1	TB	CHLOROFORM	0.3	U	0.3 UGL
		AIA027TB1	TB	N-BUTYLBENZENE	1.1	U	1.1 UGL
		AIA027TB1	TB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2 UGL
		AIA027TB1	TB	BROMOCHLOROMETHANE	0.4	U	0.4 UGL
		AIA027TB1	TB	DIBROMOCHLOROMETHANE	0.5	U	0.5 UGL
		AIA027TB1	TB	DIBROMOMETHANE	2.4	U	2.4 UGL
		AIA027TB1	TB	DICHLORODIFLUOROMETHANE	1	U	1 UGL
		AIA027TB1	TB	ETHYL BENZENE	0.6	U	0.6 UGL
		AIA027TB1	TB	HEXACHLOROBUTADIENE	1.1	U	1.1 UGL
		AIA027TB1	TB	ISOPROPYL BENZENE	0.5	U	0.5 UGL
		AIA027TB1	TB	CHLOROMETHANE	1.3	U	1.3 UGL
		AIA027TB1	TB	1,2,3-TRICHLOROBENZENE	0.3	U	0.3 UGL
		AIA028EB1	EB	1,2-DICHLOROPROpane	0.4	U	0.4 UGL
		AIA028EB1	EB	NAPHTHALENE	0.4	U	0.4 UGL
		AIA028EB1	EB	1,2,4-TRIMETHYLBENZENE	1.3	U	1.3 UGL
		AIA028EB1	EB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6 UGL
		AIA028EB1	EB	1,2-DIBROMOETHANE	0.6	U	0.6 UGL
		AIA028EB1	EB	O-XYLENE	1.1	U	1.1 UGL
		AIA028EB1	EB	m,p-xylene	1.3	U	1.3 UGL
		AIA028EB1	EB	1,2-DICHLOROETHANE	0.6	U	0.6 UGL
		AIA028EB1	EB	1,2,3-TRICHLOROBENZENE	0.3	U	0.3 UGL
		AIA028EB1	EB	P-ISOPROPYL TOLUENE	1.2	U	1.2 UGL
		AIA028EB1	EB	1,3,5-TRIMETHYLBENZENE	0.5	U	0.5 UGL
		AIA028EB1	EB	1,3-DICHLOROBENZENE	1.2	U	1.2 UGL
		AIA028EB1	EB	N-BUTYLBENZENE	1.1	U	1.1 UGL

SDG	Method Field ID	QCType	Analyte	Result	LabFlag	RL Units
9802168	SW8260A AIA028EB1	EB	SEC-BUTYLBENZENE	1.3	U	1.3 UG/L
	AIA028EB1	EB	1,2-DICHLOROBENZENE	0.3	U	0.3 UG/L
	AIA028EB1	EB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4 UG/L
	AIA028EB1	EB	METHYLENE CHLORIDE	0.3	U	0.3 UG/L
	AIA028EB1	EB	N-PROPYLBENZENE	0.4	U	0.4 UG/L
	AIA028EB1	EB	VINYL CHLORIDE	1.1	U	1.1 UG/L
	AIA028EB1	EB	1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5 UG/L
	AIA028EB1	EB	TRANS-1,3-DICHLOROPROPENE	1	U	1 UG/L
	AIA028EB1	EB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4 UG/L
	AIA028EB1	EB	ISOPROPYLBENZENE	0.5	U	0.5 UG/L
	AIA028EB1	EB	1,2,3-TRICHLOROPROPANE	3.2	U	3.2 UG/L
	AIA028EB1	EB	1,1,2-TRICHLOROETHANE	1	U	1 UG/L
	AIA028EB1	EB	1,1-DICHLOROETHANE	0.4	U	0.4 UG/L
	AIA028EB1	EB	HEXACHLOROBUTADIENE	1.1	U	1.1 UG/L
	AIA028EB1	EB	1,1-DICHLOROETHENE	1.2	U	1.2 UG/L
	AIA028EB1	EB	1,1-DICHLOROPROPENE	1	U	1 UG/L
	AIA028EB1	EB	1,4-DICHLOROBENZENE	0.3	U	0.3 UG/L
	AIA028EB1	EB	1,1,1-TRICHLOROETHANE	0.8	U	0.8 UG/L
	AIA028EB1	EB	TOLUENE	11	U	1.1 UG/L
	AIA028EB1	EB	ETHYLBENZENE	0.6	U	0.6 UG/L
	AIA028EB1	EB	DICHLORODIFLUOROMETHANE	1	U	1 UG/L
	AIA028EB1	EB	TRICHLOROETHENE	1	U	1 UG/L
	AIA028EB1	EB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6 UG/L
	AIA028EB1	EB	DOBROMETHANE	2.4	U	2.4 UG/L
	AIA028EB1	EB	DOBROMOCHLOROMETHANE	0.5	U	0.5 UG/L
	AIA028EB1	EB	TRICHLOROFLUOROMETHANE	0.8	U	0.8 UG/L
	AIA028EB1	EB	CIS-1,3-DICHLOROPROPENE	1	U	1 UG/L
	AIA028EB1	EB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2 UG/L
	AIA028EB1	EB	1,3-DICHLOROPROPANE	0.4	U	0.4 UG/L
	AIA028EB1	EB	CHLOROFORM	0.3	U	0.3 UG/L
	AIA028EB1	EB	1-CHLOROHEXANE	0.5	U	0.5 UG/L
	AIA028EB1	EB	CHLOROETHANE	1	U	1 UG/L
	AIA028EB1	EB	BENZENE	0.4	U	0.4 UG/L

SDG	Method ID	Field ID	QC Type	Analyte	Result	LabFlag	RL Units
9802168	SW8260A	AIA028EB1	EB	2,2-DICHLOROPROpane	3.5	U	3.5 UGL
		AIA028EB1	EB	STYRENE	0.4	U	0.4 UGL
		AIA028EB1	EB	2-CHLOROTOLUENE	0.4	U	0.4 UGL
		AIA028EB1	EB	CHLOROMETHANE	1.3	U	1.3 UGL
		AIA028EB1	EB	4-CHLOROTOLUENE	0.6	U	0.6 UGL
		AIA028EB1	EB	CHLOROBENZENE	0.4	U	0.4 UGL
		AIA028EB1	EB	TERT-BUTYLBENZENE	1.4	U	1.4 UGL
		AIA028EB1	EB	BROMOBENZENE	0.3	U	0.3 UGL
		AIA028EB1	EB	BROMOCHLOROMETHANE	0.4	U	0.4 UGL
		AIA028EB1	EB	BROMODICHLOROMETHANE	0.8	U	0.8 UGL
		AIA028EB1	EB	TETRACHLOROETHENE	1.4	U	1.4 UGL
		AIA028EB1	EB	BROMOFORM	1.2	U	1.2 UGL
		AIA028EB1	EB	BROMOMETHANE	1.1	U	1.1 UGL
		AIA028EB1	EB	CARBON TETRACHLORIDE	2.1	U	2.1 UGL
		AIA029AB1	AB	1,1-DICHLOROETHENE	1.2	U	1.2 UGL
		AIA029AB1	AB	METHYLENE CHLORIDE	0.3	U	0.3 UGL
		AIA029AB1	AB	1,1-DICHLOROETHANE	0.4	U	0.4 UGL
		AIA029AB1	AB	N-BUTYLBENZENE	1.1	U	1.1 UGL
		AIA029AB1	AB	N-PROPYLBENZENE	0.4	U	0.4 UGL
		AIA029AB1	AB	1,1-DICHLOROPROPENE	1	U	1 UGL
		AIA029AB1	AB	1-CHLOROHEXANE	0.5	U	0.5 UGL
		AIA029AB1	AB	TETRACHLOROETHENE	1.4	U	1.4 UGL
		AIA029AB1	AB	BROMOMETHANE	1.1	U	1.1 UGL
		AIA029AB1	AB	BROMOFORM	1.2	U	1.2 UGL
		AIA029AB1	AB	BROMODICHLOROMETHANE	0.8	U	0.8 UGL
		AIA029AB1	AB	BROMOCHLOROMETHANE	0.4	U	0.4 UGL
		AIA029AB1	AB	BROMOBENZENE	0.3	U	0.3 UGL
		AIA029AB1	AB	BENZENE	0.4	U	0.4 UGL
		AIA029AB1	AB	4-CHLOROTOLUENE	0.6	U	0.6 UGL
		AIA029AB1	AB	1,2,3-TRICHLOROBENZENE	0.3	U	0.3 UGL
		AIA029AB1	AB	2-CHLOROTOLUENE	0.4	U	0.4 UGL
		AIA029AB1	AB	CHLOROBENZENE	0.4	U	0.4 UGL
		AIA029AB1	AB	2,2-DICHLOROPROPANE	3.5	U	3.5 UGL

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL Units
9802168	SW8260A	AIA029AB1	AB	CHLOROETHANE	1	U	1 UG/L
		AIA029AB1	AB	1,4-DICHLOROBENZENE	0.3	U	0.3 UG/L
		AIA029AB1	AB	1,3-DICHLOROPROPANE	0.4	U	0.4 UG/L
		AIA029AB1	AB	1,2,3-TRICHLOROPROPANE	3.2	U	3.2 UG/L
		AIA029AB1	AB	1,3-DICHLOROBENZENE	1.2	U	1.2 UG/L
		AIA029AB1	AB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4 UG/L
		AIA029AB1	AB	1,2,4-TRIMETHYLBENZENE	1.3	U	1.3 UG/L
		AIA029AB1	AB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6 UG/L
		AIA029AB1	AB	1,2-DIBROMOETHANE	0.6	U	0.6 UG/L
		AIA029AB1	AB	1,2-DICHLOROETHANE	0.6	U	0.6 UG/L
		AIA029AB1	AB	1,3,5-TRIMETHYLBENZENE	0.5	U	0.5 UG/L
		AIA029AB1	AB	m,p-xylene	1.3	U	1.3 UG/L
		AIA029AB1	AB	ISOPROPYLBENZENE	0.5	U	0.5 UG/L
		AIA029AB1	AB	O-XYLENE	1.1	U	1.1 UG/L
		AIA029AB1	AB	P-ISOPROPYL TOLUENE	1.2	U	1.2 UG/L
		AIA029AB1	AB	SEC-BUTYLBENZENE	1.3	U	1.3 UG/L
		AIA029AB1	AB	STYRENE	0.4	U	0.4 UG/L
		AIA029AB1	AB	TERT-BUTYLBENZENE	1.4	U	1.4 UG/L
		AIA029AB1	AB	TOLUENE	1.1	U	1.1 UG/L
		AIA029AB1	AB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6 UG/L
		AIA029AB1	AB	TRANS-1,3-DICHLOROPROPENE	1	U	1 UG/L
		AIA029AB1	AB	TRICHLOROETHENE	1	U	1 UG/L
		AIA029AB1	AB	TRICHLOROFLUOROMETHANE	0.8	U	0.8 UG/L
		AIA029AB1	AB	CARBON TETRACHLORIDE	2.1	U	2.1 UG/L
		AIA029AB1	AB	1,1,2-TRICHLOROETHANE	1	U	1 UG/L
		AIA029AB1	AB	NAPHTHALENE	0.4	U	0.4 UG/L
		AIA029AB1	AB	1,2-DICHLOROBENZENE	0.3	U	0.3 UG/L
		AIA029AB1	AB	HEXACHLOROBUTADIENE	1.1	U	1.1 UG/L
		AIA029AB1	AB	ETHYL BENZENE	0.6	U	0.6 UG/L
		AIA029AB1	AB	DICHLORODIFLUOROMETHANE	1	U	1 UG/L
		AIA029AB1	AB	DIBROMOMETHANE	2.4	U	2.4 UG/L
		AIA029AB1	AB	DIBROMOCHLOROMETHANE	0.5	U	0.5 UG/L
		AIA029AB1	AB	CIS-1,3-DICHLOROPROPENE	1	U	1 UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9802168	SW820A	AIA029ABI	AB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2	UG/L
		AIA029ABI	AB	CHLOROMETHANE	1.3	U	1.3	UG/L
		AIA029ABI	AB	CHLOROFORM	1.5		0.3	UG/L
		AIA029ABI	AB	VINYL CHLORIDE	1.1	U	1.1	UG/L
		AIA029ABI	AB	1,1,1-TRICHLOROETHANE	0.8	U	0.8	UG/L
		AIA029ABI	AB	1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5	UG/L
		AIA029ABI	AB	1,2-DICHLOROPROPANE	0.4	U	0.4	UG/L
		AIA029ABI	AB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4	UG/L
	LABQC	LB	4-CHLOROTOLUENE	0.6	U	0.6	UG/L	
	LABQC	LB	SEC-BUTYLBENZENE	1.3	U	1.3	UG/L	
	LABQC	LB	BROMOMETHANE	1.1	U	1.1	UG/L	
	LABQC	LB	ISOPROPYLBENZENE	0.5	U	0.5	UG/L	
	LABQC	LB	OXYLENE	1.1	U	1.1	UG/L	
	LABQC	LB	N-BUTYLBENZENE	1.1	U	1.1	UG/L	
	LABQC	LB	BENZENE	0.4	U	0.4	UG/L	
	LABQC	LB	CHLOROFORM	0.3	U	0.3	UG/L	
	LABQC	LB	BROMODICHLOROMETHANE	0.8	U	0.8	UG/L	
	LABQC	LB	TRICHLOROFLUOROMETHANE	0.8	U	0.8	UG/L	
	LABQC	LB	NAPHTHALENE	0.4	U	0.4	UG/L	
	LABQC	LB	TOLUENE	1.1	U	1.1	UG/L	
	LABQC	LB	ETHYL BENZENE	0.6	U	0.6	UG/L	
	LABQC	LB	BROMOBENZENE	0.3	U	0.3	UG/L	
	LABQC	LB	TRICHLOROETHENE	1	U	1	UG/L	
	LABQC	LB	P-ISOPROPYL TOLUENE	1.2	U	1.2	UG/L	
	LABQC	LB	BROMOFORM	1.2	U	1.2	UG/L	
	LABQC	LB	TRANS-1,3-DICHLOROPROPENE	1	U	1	UG/L	
	LABQC	LB	N-PROPYLBENZENE	0.4	U	0.4	UG/L	
	LABQC	LB	m,p-xylene	1.3	U	1.3	UG/L	
	LABQC	LB	CHLOROMETHANE	1.3	U	1.3	UG/L	
	LABQC	LB	DIBROMOMETHANE	2.4	U	2.4	UG/L	
	LABQC	LB	BROMOCHLOROMETHANE	0.4	U	0.4	UG/L	
	LABQC	LB	CARBON TETRACHLORIDE	2.1	U	2.1	UG/L	
	LABQC	LB	2,2-DICHLOROPROPANE	3.5	U	3.5	UG/L	

SDG	Method Field ID	QCType	Analyte	Result	LabFlag	RL Units
9802168	SW8260A LABQC	LB	DICHLORODIFLUOROMETHANE	1	U	1 UG/L
	LABQC	LB	STYRENE	0.4	U	0.4 UG/L
	LABQC	LB	VINYL CHLORIDE	1.1	U	1.1 UG/L
	LABQC	LB	1-CHLOROHEXANE	0.5	U	0.5 UG/L
	LABQC	LB	CIS 1,2-DICHLOROETHENE	1.2	U	1.2 UG/L
	LABQC	LB	CHLOROBENZENE	0.4	U	0.4 UG/L
	LABQC	LB	TETRACHLOROETHENE	1.4	U	1.4 UG/L
	LABQC	LB	HEXA CHLOROBUTADIENE	1.1	U	1.1 UG/L
	LABQC	LB	TRANS 1,2-DICHLOROETHENE	0.6	U	0.6 UG/L
	LABQC	LB	CIS 1,3-DICHLOROPROPENE	1	U	1 UG/L
	LABQC	LB	TERT-BUTYL BENZENE	1.4	U	1.4 UG/L
	LABQC	LB	CHLOROETHANE	1	U	1 UG/L
	LABQC	LB	2-CHLOROTOLUENE	0.4	U	0.4 UG/L
	LABQC	LB	METHYLENE CHLORIDE	0.8	U	0.3 UG/L
	LABQC	LB	DI BROMOCHLOROMETHANE	0.5	U	0.5 UG/L
	LABQC	LB	METHYLENE CHLORIDE	0.57	U	0.3 UG/L
	LABQC	LB	1,4-DICHLOROBENZENE	0.3	U	0.3 UG/L
	LABQC	LB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4 UG/L
	LABQC	LB	1,2,3-TRICHLOROPROPANE	3.2	U	3.2 UG/L
	LABQC	LB	1,1,1-TRICHLOROETHANE	0.8	U	0.8 UG/L
	LABQC	LB	1,1-DICHLOROPROPENE	1	U	1 UG/L
	LABQC	LB	1,2-DIBROMOETHANE	0.6	U	0.6 UG/L
	LABQC	LB	1,1,2,2-TETRA CHLOROETHANE	0.4	U	0.4 UG/L
	LABQC	LB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6 UG/L
	LABQC	LB	1,1,1,2-TETRA CHLOROETHANE	0.5	U	0.5 UG/L
	LABQC	LB	1,2-DICHLOROETHANE	0.6	U	0.6 UG/L
	LABQC	LB	1,1,2-TRICHLOROETHANE	1	U	1 UG/L
	LABQC	LB	1,2-DICHLOROBENZENE	0.3	U	0.3 UG/L
	LABQC	LB	1,1-DICHLOROETHANE	0.4	U	0.4 UG/L
	LABQC	LB	1,1-DICHLOROETHENE	1.2	U	1.2 UG/L
	LABQC	LB	1,2,3-TRICHLOROBENZENE	0.3	U	0.3 UG/L
	LABQC	LB	1,2,4-TRIMETHYL BENZENE	1.3	U	1.3 UG/L
	LABQC	LB	1,3,5-TRIMETHYL BENZENE	0.5	U	0.5 UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9802168	SW8260A	LABQC	LB	1,2-DICHLOROPROPROPANE	0.4	U	0.4	UG/L
		LABQC	LB	1,3-DICHLOROPROPROPANE	0.4	U	0.4	UG/L
		LABQC	LB	1,3-DICHLOROBENZENE	1.2	U	1.2	UG/L
9802180	SW8260A	AIA039TB1	TB	CHLOROFORM	0.3	U	0.3	UG/L
		AIA039TB1	TB	CHLOROETHANE	1	U	1	UG/L
		AIA039TB1	TB	1,2-DICHLOROBENZENE	0.3	U	0.3	UG/L
		AIA039TB1	TB	CHLOROBENZENE	0.4	U	0.4	UG/L
		AIA039TB1	TB	CARBON TETRACHLORIDE	2.1	U	2.1	UG/L
		AIA039TB1	TB	1,2-DICHLOROETHANE	0.6	U	0.6	UG/L
		AIA039TB1	TB	BROMOMETHANE	1.1	U	1.1	UG/L
		AIA039TB1	TB	BROMOFORM	1.2	U	1.2	UG/L
		AIA039TB1	TB	BENZENE	0.4	U	0.4	UG/L
		AIA039TB1	TB	1,3,5-TRIMETHYLBENZENE	0.5	U	0.5	UG/L
		AIA039TB1	TB	2-CHLOROTOLUENE	0.4	U	0.4	UG/L
		AIA039TB1	TB	BROMODICHLOROMETHANE	0.8	U	0.8	UG/L
		AIA039TB1	TB	1,3-DICHLOROBENZENE	1.2	U	1.2	UG/L
		AIA039TB1	TB	1,3-DICHLOROPROPANE	0.4	U	0.4	UG/L
		AIA039TB1	TB	BROMOCHLOROMETHANE	0.4	U	0.4	UG/L
		AIA039TB1	TB	1,4-DICHLOROBENZENE	0.3	U	0.3	UG/L
		AIA039TB1	TB	BROMOBENZENE	0.3	U	0.3	UG/L
		AIA039TB1	TB	1-CHLOROHEXANE	0.5	U	0.5	UG/L
		AIA039TB1	TB	2,2-DICHLOROPROPANE	3.5	U	3.5	UG/L
		AIA039TB1	TB	4-CHLOROTOLUENE	0.6	U	0.6	UG/L
		AIA039TB1	TB	1,2-DICHLOROPROPANE	0.4	U	0.4	UG/L
		AIA039TB1	TB	N-PROPYLBENZENE	0.4	U	0.4	UG/L
		AIA039TB1	TB	VINYL CHLORIDE	1.1	U	1.1	UG/L
		AIA039TB1	TB	TRICHLOROFLUOROMETHANE	0.8	U	0.8	UG/L
		AIA039TB1	TB	TRICHLOROETHENE	1	U	1	UG/L
		AIA039TB1	TB	TRANS-1,3-DICHLOROPROPENE	1	U	1	UG/L
		AIA039TB1	TB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6	UG/L
		AIA039TB1	TB	TOLUENE	1.1	U	1.1	UG/L
		AIA039TB1	TB	TETRACHLOROETHENE	1.4	U	1.4	UG/L
		AIA039TB1	TB	TERT-BUTYL BENZENE	1.4	U	1.4	UG/L

SDG	Method Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9802180	SW8260A AIA039TB1	TB	STYRENE	0.4	U	0.4	UG/L
	AIA039TB1	TB	SEC-BUTYL BENZENE	1.3	U	1.3	UG/L
	AIA039TB1	TB	P-ISOPROPYL TOLUENE	1.2	U	1.2	UG/L
	AIA039TB1	TB	DI(BROMOMETHANE)	2.4	U	2.4	UG/L
	AIA039TB1	TB	NAPHTHALENE	0.4	U	0.4	UG/L
	AIA039TB1	TB	CHLOROMETHANE	1.3	U	1.3	UG/L
	AIA039TB1	TB	N-BUTYL BENZENE	1.1	U	1.1	UG/L
	AIA039TB1	TB	METHYLENE CHLORIDE	0.83	U	0.3	UG/L
	AIA039TB1	TB	m,p-xylene	1.3	U	1.3	UG/L
	AIA039TB1	TB	ISOPROPYL BENZENE	0.5	U	0.5	UG/L
	AIA039TB1	TB	HEXA(Chloro)Butadiene	1.1	U	1.1	UG/L
	AIA039TB1	TB	ETHYL BENZENE	0.6	U	0.6	UG/L
	AIA039TB1	TB	1,1-DICHLOROETHANE	0.4	U	0.4	UG/L
	AIA039TB1	TB	DICHLORODIFLUOROMETHANE	1	U	1	UG/L
	AIA039TB1	TB	1,2-DIBROMOETHANE	0.6	U	0.6	UG/L
	AIA039TB1	TB	DIBROMOCHLOROMETHANE	0.5	U	0.5	UG/L
	AIA039TB1	TB	CIS-1,3-DICHLOROPROPENE	1	U	1	UG/L
	AIA039TB1	TB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2	UG/L
	AIA039TB1	TB	O-XYLENE	1.1	U	1.1	UG/L
	AIA039TB1	TB	1,1,1-TRICHLOROETHANE	0.8	U	0.8	UG/L
	AIA039TB1	TB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6	UG/L
	AIA039TB1	TB	1,1-DICHLOROPROPENE	1	U	1	UG/L
	AIA039TB1	TB	1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5	UG/L
	AIA039TB1	TB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4	UG/L
	AIA039TB1	TB	1,1,2-TRICHLOROETHANE	1	U	1	UG/L
	AIA039TB1	TB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4	UG/L
	AIA039TB1	TB	1,2,4-TRIMETHYLBENZENE	1.3	U	1.3	UG/L
	AIA039TB1	TB	1,1-DICHLOROETHENE	1.2	U	1.2	UG/L
	AIA039TB1	TB	1,2,3-TRICHLOROPROPANE	3.2	U	3.2	UG/L
	AIA039TB1	TB	1,2,3-TRICHLOROBENZENE	0.3	U	0.3	UG/L
	AIA040EB1	EB	1,3-DICHLOROPROPANE	0.4	U	0.4	UG/L
	AIA040EB1	EB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6	UG/L
	AIA040EB1	EB	N-PROPYLBENZENE	0.4	U	0.4	UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9802180	SW820A	AIA040EB1	EB	NAPHTHALENE	0.4	U	0.4	UG/L
	AIA040EB1	EB	OXYLENE		1.1	U	1.1	UG/L
	AIA040EB1	EB	SEC-BUTYLBENZENE		1.3	U	1.3	UG/L
	AIA040EB1	EB	STYRENE		0.4	U	0.4	UG/L
	AIA040EB1	EB	TERT-BUTYLBENZENE		1.4	U	1.4	UG/L
	AIA040EB1	EB	TETRACHLOROETHENE		1.4	U	1.4	UG/L
	AIA040EB1	EB	TOLUENE		1.1	U	1.1	UG/L
	AIA040EB1	EB	P-ISOPROPYL-TOLUENE		1.2	U	1.2	UG/L
	AIA040EB1	EB	TRANS-1,3-DICHLOROPROPENE	1	U	U	1	UG/L
	AIA040EB1	EB	TRICHLOROETHENE	1	U	U	1	UG/L
	AIA040EB1	EB	TRICHLOROFLUOROMETHANE	0.8	U	U	0.8	UG/L
	AIA040EB1	EB	N-BUTYLBENZENE	1.1	U	U	1.1	UG/L
	AIA040EB1	EB	1,4-DICHLOROBENZENE	0.3	U	U	0.3	UG/L
	AIA040EB1	EB	DBROMOMETHANE	2.4	U	U	2.4	UG/L
	AIA040EB1	EB	1,3-DICHLOROBENZENE	1.2	U	U	1.2	UG/L
	AIA040EB1	EB	1,3,5-TRIMETHYLBENZENE	0.5	U	U	0.5	UG/L
	AIA040EB1	EB	1,2-DICHLOROPROPANE	0.4	U	U	0.4	UG/L
	AIA040EB1	EB	1,2-DICHLOROETHANE	0.6	U	U	0.6	UG/L
	AIA040EB1	EB	1,2-DICHLOROBENZENE	0.3	U	U	0.3	UG/L
	AIA040EB1	EB	1,2-DIBROMOETHANE	0.6	U	U	0.6	UG/L
	AIA040EB1	EB	VINYL CHLORIDE	1.1	U	U	1.1	UG/L
	AIA040EB1	EB	BROMOMETHANE	1.1	U	U	1.1	UG/L
	AIA040EB1	EB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	U	2.6	UG/L
	AIA040EB1	EB	CHLOROBENZENE	0.4	U	U	0.4	UG/L
	AIA040EB1	EB	2,2-DICHLOROPROPANE	3.5	U	U	3.5	UG/L
	AIA040EB1	EB	2-CHLOROTOLUENE	0.4	U	U	0.4	UG/L
	AIA040EB1	EB	4-CHLOROTOLUENE	0.6	U	U	0.6	UG/L
	AIA040EB1	EB	1-CHLOROHEXANE	0.5	U	U	0.5	UG/L
	AIA040EB1	EB	BENZENE	0.4	U	U	0.4	UG/L
	AIA040EB1	EB	BROMOBENZENE	0.3	U	U	0.3	UG/L
	AIA040EB1	EB	BROMOCHLOROMETHANE	0.4	U	U	0.4	UG/L
	AIA040EB1	EB	ETHYLBENZENE	0.6	U	U	0.6	UG/L
	AIA040EB1	EB	BROMOFORM	1.2	U	U	1.2	UG/L

SDG	Method Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9802180	SW8260A	AIA040EB1	EB	METHYLENE CHLORIDE	1	U	0.3 UG/L
	AIA040EB1	EB	CARBON TETRACHLORIDE	2.1	U	2.1	UG/L
	AIA040EB1	EB	CHLOROETHANE	1	U	1	UG/L
	AIA040EB1	EB	CHLOROMETHANE	1.3	U	1.3	UG/L
	AIA040EB1	EB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2	UG/L
	AIA040EB1	EB	CIS-1,3-DICHLOROPROPENE	1	U	1	UG/L
	AIA040EB1	EB	DIBROMOCHLOROMETHANE	0.5	U	0.5	UG/L
	AIA040EB1	EB	DICHLORODIFLUOROMETHANE	1	U	1	UG/L
	AIA040EB1	EB	HEXACHLOROBUTADIENE	1.1	U	1.1	UG/L
	AIA040EB1	EB	ISOPROPYLBENZENE	0.5	U	0.5	UG/L
	AIA040EB1	EB	m,p-xylene	1.3	U	1.3	UG/L
	AIA040EB1	EB	BROMODICHLOROMETHANE	0.8	U	0.8	UG/L
	AIA040EB1	EB	1,1,1-TRICHLOROETHANE	0.8	U	0.8	UG/L
	AIA040EB1	EB	CHLOROFORM	0.3	U	0.3	UG/L
	AIA040EB1	EB	1,2,3-TRICHLOROPROPANE	3.2	U	3.2	UG/L
	AIA040EB1	EB	1,2,4-TRIMETHYLBENZENE	1.3	U	1.3	UG/L
	AIA040EB1	EB	1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5	UG/L
	AIA040EB1	EB	1,2,3-TRICHLOROBENZENE	0.3	U	0.3	UG/L
	AIA040EB1	EB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4	UG/L
	AIA040EB1	EB	1,1,2-TRICHLOROETHANE	1	U	1	UG/L
	AIA040EB1	EB	1,1-DICHLOROETHENE	0.4	U	0.4	UG/L
	AIA040EB1	EB	1,1-DICHLOROPROPENE	1.2	U	1.2	UG/L
	AIA040EB1	EB	1,1-DICHLOROPROPENE	1	U	1	UG/L
	AIA040EB1	EB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4	UG/L
	LABQC	LB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6	UG/L
	LABQC	LB	TRANS-1,3-DICHLOROPROPENE	1	U	1	UG/L
	LABQC	LB	VINYL CHLORIDE	1	U	1	UG/L
	LABQC	LB	DICHLORODIFLUOROMETHANE	1	U	1	UG/L
	LABQC	LB	O-XYLENE	1.1	U	1.1	UG/L
	LABQC	LB	TRICHLOROETHENE	1	U	1	UG/L
	LABQC	LB	BROMOFORM	1.2	U	1.2	UG/L
	LABQC	LB	1-CHLOROHEXANE	0.5	U	0.5	UG/L
	LABQC	LB	TRICHLOROFUOROMETHANE	0.8	U	0.8	UG/L

SDG	Method ID	Field ID	QCType	Analyte	Result	LabFlag	RL Units
9802180	SW8260A	LABQC	LB	1,4-DICHLOROBENZENE	0.3	U	0.3 UGL
		LABQC	LB	HEXACHLOROBUTADIENE	1.1	U	1.1 UGL
		LABQC	LB	NAPHTHALENE	0.4	U	0.4 UGL
		LABQC	LB	METHYLENE CHLORIDE	0.8	U	0.3 UGL
		LABQC	LB	CHLOROBENZENE	0.4	U	0.4 UGL
		LABQC	LB	TOLUENE	1.1	U	1.1 UGL
		LABQC	LB	CHLOROFORM	0.3	U	0.3 UGL
		LABQC	LB	SEC-BUTYLBENZENE	1.3	U	1.3 UGL
		LABQC	LB	CIS-1,3-DICHLOROPROPENE	1	U	1 UGL
		LABQC	LB	BROMOCHLOROMETHANE	0.4	U	0.4 UGL
		LABQC	LB	TERT-BUTYLBENZENE	1.4	U	1.4 UGL
		LABQC	LB	CHLOROETHANE	1	U	1 UGL
		LABQC	LB	BROMOMETHANE	1.1	U	1.1 UGL
		LABQC	LB	N-BUTYL BENZENE	1.1	U	1.1 UGL
		LABQC	LB	TETRACHLOROETHENE	1.4	U	1.4 UGL
		LABQC	LB	DIBROMOCHLOROMETHANE	0.5	U	0.5 UGL
		LABQC	LB	BROMODICHLOROMETHANE	0.8	U	0.8 UGL
		LABQC	LB	4-CHLOROTOLUENE	0.6	U	0.6 UGL
		LABQC	LB	2-CHLOROTOLUENE	0.4	U	0.4 UGL
		LABQC	LB	ISOPROPYL BENZENE	0.5	U	0.5 UGL
		LABQC	LB	P-ISOPROPYL TOLUENE	1.2	U	1.2 UGL
		LABQC	LB	DIBROMOMETHANE	2.4	U	2.4 UGL
		LABQC	LB	BROMOBENZENE	0.3	U	0.3 UGL
		LABQC	LB	CARBON TETRACHLORIDE	2.1	U	2.1 UGL
		LABQC	LB	N-PROPYLBENZENE	0.4	U	0.4 UGL
		LABQC	LB	BENZENE	0.4	U	0.4 UGL
		LABQC	LB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2 UGL
		LABQC	LB	2,2-DICHLOROPROpane	3.5	U	3.5 UGL
		LABQC	LB	CHLOROMETHANE	1.3	U	1.3 UGL
		LABQC	LB	STYRENE	0.4	U	0.4 UGL
		LABQC	LB	ETHYL BENZENE	0.6	U	0.6 UGL
		LABQC	LB	m,p-xylene	1.3	U	1.3 UGL
		LABQC	LB	1,3-DICHLOROPROPANE	0.4	U	0.4 UGL

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9802180	SW8260A	LABQC	LB	1,2,3-TRICHLOROPROPANE	3.2	U	3.2	UG/L
		LABQC	LB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4	UG/L
		LABQC	LB	1,2,4-TRIMETHYLBENZENE	1.3	U	1.3	UG/L
		LABQC	LB	1,3-DICHLOROBENZENE	1.2	U	1.2	UG/L
		LABQC	LB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6	UG/L
		LABQC	LB	1,2-DICHLOROBENZENE	0.3	U	0.3	UG/L
		LABQC	LB	1,2,3-TRICHLOROBENZENE	0.3	U	0.3	UG/L
		LABQC	LB	1,2-DICHLOROPROPANE	0.4	U	0.4	UG/L
		LABQC	LB	1,1-DICHLOROPROPENE	1	U	1	UG/L
		LABQC	LB	1,3,5-TRIMETHYLBENZENE	0.5	U	0.5	UG/L
		LABQC	LB	1,2-DICHLOROETHANE	0.6	U	0.6	UG/L
		LABQC	LB	1,1,2-TRICHLOROETHANE	1	U	1	UG/L
		LABQC	LB	1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5	UG/L
		LABQC	LB	1,1-DICHLOROETHENE	1.2	U	1.2	UG/L
		LABQC	LB	1,1,1-TRICHLOROETHANE	0.8	U	0.8	UG/L
		LABQC	LB	1,1-DICHLOROETHANE	0.4	U	0.4	UG/L
		LABQC	LB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4	UG/L
		LABQC	LB	1,2-DIBROMOETHANE	0.6	U	0.6	UG/L
				ETHYLBENZENE	0.6	U	0.6	UG/L
		AB001TB1	TB	DICHLORODIFLUOROMETHANE	1	U	1	UG/L
		AB001TB1	TB	2-CHLOROTOLUENE	0.4	U	0.4	UG/L
		AB001TB1	TB	4-CHLOROTOLUENE	0.6	U	0.6	UG/L
		AB001TB1	TB	DBROMOMETHANE	2.4	U	2.4	UG/L
		AB001TB1	TB	DBROMOCHLOROMETHANE	0.5	U	0.5	UG/L
		AB001TB1	TB	CARBON TETRACHLORIDE	2.1	U	2.1	UG/L
		AB001TB1	TB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2	UG/L
		AB001TB1	TB	BROMOBENZENE	0.3	U	0.3	UG/L
		AB001TB1	TB	CHLOROFORM	0.3	U	0.3	UG/L
		AB001TB1	TB	BROMOCHLOROMETHANE	0.4	U	0.4	UG/L
		AB001TB1	TB	CHLOROETHANE	1	U	1	UG/L
		AB001TB1	TB	CHLOROBENZENE	0.4	U	0.4	UG/L
		AB001TB1	TB	BROMODICHLOROMETHANE	0.8	U	0.8	UG/L
		AB001TB1	TB	BROMOFORM	1.2	U	1.2	UG/L

SDG	Method ID	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9804159	SW8260A	AIB001TB1	TB	BROMOMETHANE	1.1	U	1.1	UG/L
		AIB001TB1	TB	BENZENE	0.4	U	0.4	UG/L
		AIB001TB1	TB	P-ISOPROPYL TOLUENE	1.2	U	1.2	UG/L
		AIB001TB1	TB	VINYL CHLORIDE	1.1	U	1.1	UG/L
		AIB001TB1	TB	TRICHLOROFLUOROMETHANE	0.8	U	0.8	UG/L
		AIB001TB1	TB	TRICHLOROETHENE	1	U	1	UG/L
		AIB001TB1	TB	TRANS-1,3-DICHLOROPROPENE	1	U	1	UG/L
		AIB001TB1	TB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6	UG/L
		AIB001TB1	TB	TOLUENE	1.1	U	1.1	UG/L
		AIB001TB1	TB	TETRACHLOROETHENE	1.4	U	1.4	UG/L
		AIB001TB1	TB	TERT-BUTYL BENZENE	1.4	U	1.4	UG/L
		AIB001TB1	TB	N-BUTYL BENZENE	1.1	U	1.1	UG/L
		AIB001TB1	TB	SEC-BUTYL BENZENE	1.3	U	1.3	UG/L
		AIB001TB1	TB	HEXACHLOROBUTADIENE	1.1	U	1.1	UG/L
		AIB001TB1	TB	O-XYLENE	1.1	U	1.1	UG/L
		AIB001TB1	TB	NAPHTHALENE	0.4	U	0.4	UG/L
		AIB001TB1	TB	CHLOROMETHANE	1.3	U	1.3	UG/L
		AIB001TB1	TB	N-PROPYLBENZENE	0.4	U	0.4	UG/L
		AIB001TB1	TB	2,2-DICHLOROPROpane	3.5	U	3.5	UG/L
		AIB001TB1	TB	METHYLENE CHLORIDE	0.3	U	0.3	UG/L
		AIB001TB1	TB	m,p-xylene	1.3	U	1.3	UG/L
		AIB001TB1	TB	M+p-XYLENE	1.3	U	1.3	UG/L
		AIB001TB1	TB	ISOPROPYL BENZENE	0.5	U	0.5	UG/L
		AIB001TB1	TB	STYRENE	0.4	U	0.4	UG/L
		AIB001TB1	TB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4	UG/L
		AIB001TB1	TB	1-CHLOROHEXANE	0.5	U	0.5	UG/L
		AIB001TB1	TB	CIS-1,3-DICHLOROPROPENE	1	U	1	UG/L
		AIB001TB1	TB	1,1,1-TRICHLOROETHANE	0.8	U	0.8	UG/L
		AIB001TB1	TB	1,1,2-TRICHLOROETHANE	1	U	1	UG/L
		AIB001TB1	TB	1,1-DICHLOROETHANE	0.4	U	0.4	UG/L
		AIB001TB1	TB	1,1-DICHLOROETHENE	1.2	U	1.2	UG/L
		AIB001TB1	TB	1,1-DICHLOROPROPENE	1	U	1	UG/L
		AIB001TB1	TB	1,2,3-TRICHLOROBENZENE	0.3	U	0.3	UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL Units
9804159	SW8260A	AIB001TB1	TB	1,2,3-TRICHLOROPROpane	3.2	U	3.2 UGL
		AIB001TB1	TB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4 UGL
		AIB001TB1	TB	1,3-DICHLOROBENZENE	1.2	U	1.2 UGL
		AIB001TB1	TB	1,3-DICHLOROPROPANE	0.4	U	0.4 UGL
		AIB001TB1	TB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6 UGL
		AIB001TB1	TB	1,2-DIBROMOETHANE	0.6	U	0.6 UGL
		AIB001TB1	TB	1,2-DICHLOROBENZENE	0.3	U	0.3 UGL
		AIB001TB1	TB	1,2-DICHLOROETHANE	0.6	U	0.6 UGL
		AIB001TB1	TB	1,2-DICHLOROPROPANE	0.4	U	0.4 UGL
		AIB001TB1	TB	1,3,5-TRIMETHYLBENZENE	0.5	U	0.5 UGL
		AIB001TB1	TB	1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5 UGL
		AIB001TB1	TB	1,4-DICHLOROBENZENE	0.3	U	0.3 UGL
		AIB001TB1	TB	1,2,4-TRIMETHYLBENZENE	1.3	U	1.3 UGL
		AIB002EB1	EB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2 UGL
		AIB002EB1	EB	CHLOROMETHANE	1.3	U	1.3 UGL
		AIB002EB1	EB	CHLOROFORM	0.3	U	0.3 UGL
		AIB002EB1	EB	CHLOROETHANE	1	U	1 UGL
		AIB002EB1	EB	CARBON TETRACHLORIDE	2.1	U	2.1 UGL
		AIB002EB1	EB	ETHYL BENZENE	0.6	U	0.6 UGL
		AIB002EB1	EB	BROMOMETHANE	1.1	U	1.1 UGL
		AIB002EB1	EB	BROMOFORM	1.2	U	1.2 UGL
		AIB002EB1	EB	CHLOROBENZENE	0.4	U	0.4 UGL
		AIB002EB1	EB	CIS-1,3-DICHLOROPROPENE	1	U	1 UGL
		AIB002EB1	EB	DIBROMOCHLOROMETHANE	0.5	U	0.5 UGL
		AIB002EB1	EB	DICHLORODIFLUOROMETHANE	1	U	1 UGL
		AIB002EB1	EB	HEXA CHLOROBUTADIENE	1.1	U	1.1 UGL
		AIB002EB1	EB	ISOPROPYL BENZENE	0.5	U	0.5 UGL
		AIB002EB1	EB	M+p-XYLENE	1.3	U	1.3 UGL
		AIB002EB1	EB	BROMODICHLOROMETHANE	0.8	U	0.8 UGL
		AIB002EB1	EB	1,3,5-TRIMETHYLBENZENE	0.5	U	0.5 UGL
		AIB002EB1	EB	m,p-Xylene	1.3	U	1.3 UGL
		AIB002EB1	EB	DIBROMOMETHANE	2.4	U	2.4 UGL
		AIB002EB1	EB	1,3-DICHLOROBENZENE	1.2	U	1.2 UGL

SDG	Method Field ID	QCType	Analyte	Result LabFlag	RL Units
9804159	SW8260A	AIB002EB	EB	1,2,3-TRICHLOROBENZENE	0.3 U 0.3 UGL
		AIB002EB	EB	1,2,3-TRICHLOROPROpane	3.2 U 3.2 UGL
		AIB002EB	EB	1,2,4-TRICHLOROBENZENE	0.4 U 0.4 UGL
		AIB002EB	EB	1,2,4-TRIMETHYLBENZENE	1.3 U 1.3 UGL
		AIB002EB	EB	1,2-DIBROMO-3-CHLOROPROpane	2.6 U 2.6 UGL
		AIB002EB	EB	1,2-DIBROMOETHANE	0.6 U 0.6 UGL
		AIB002EB	EB	1,2-DICHLOROBENZENE	0.3 U 0.3 UGL
		AIB002EB	EB	1,2-DICHLOROETHANE	0.6 U 0.6 UGL
		AIB002EB	EB	1,3-DICHLOROPROpane	0.4 U 0.4 UGL
		AIB002EB	EB	TRICHLOROETHENE	1 U 1 UGL
		AIB002EB	EB	BROMOCHLOROMETHANE	0.4 U 0.4 UGL
		AIB002EB	EB	METHYLENE CHLORIDE	0.3 U 0.3 UGL
		AIB002EB	EB	1,4-DICHLOROBENZENE	0.3 U 0.3 UGL
		AIB002EB	EB	1-CHLOROHEXANE	0.5 U 0.5 UGL
		AIB002EB	EB	2,2-DICHLOROPROpane	3.5 U 3.5 UGL
		AIB002EB	EB	2-CHLOROTOLUENE	0.4 U 0.4 UGL
		AIB002EB	EB	4-CHLOROTOLUENE	0.6 U 0.6 UGL
		AIB002EB	EB	BENZENE	0.4 U 0.4 UGL
		AIB002EB	EB	BROMOBENZENE	0.3 U 0.3 UGL
		AIB002EB	EB	1,2-DICHLOROPROpane	0.4 U 0.4 UGL
		AIB002EB	EB	1,1-DICHLOROETHANE	0.4 U 0.4 UGL
		AIB002EB	EB	1,1-DICHLOROPROPENE	1 U 1 UGL
		AIB002EB	EB	TRANS-1,2-DICHLOROETHENE	0.6 U 0.6 UGL
		AIB002EB	EB	N-BUTYLBENZENE	1.1 U 1.1 UGL
		AIB002EB	EB	1,1,1,2-TETRACHLOROETHANE	0.5 U 0.5 UGL
		AIB002EB	EB	1,1,1-TRICHLOROETHANE	0.8 U 0.8 UGL
		AIB002EB	EB	1,1,2-TRICHLOROETHANE	1 U 1 UGL
		AIB002EB	EB	1,1-DICHLOROETHENE	1.2 U 1.2 UGL
		AIB002EB	EB	VINYL CHLORIDE	1.1 U 1.1 UGL
		AIB002EB	EB	TRICHLOROFLUOROMETHANE	0.8 U 0.8 UGL
		AIB002EB	EB	OXYLENE	1.1 U 1.1 UGL
		AIB002EB	EB	N-PROPYLBENZENE	0.4 U 0.4 UGL
		AIB002EB	EB	1,1,2,2-TETRACHLOROETHANE	0.4 U 0.4 UGL

SDG	Method FieldID	QCType	Analyte	Result	LabFlag	RL Units
9804159	SW8260A	AIB002EB1	NAPHTHALENE	0.4	U	0.4 UG/L
	AIB002EB1	EB	TRANS-1,3-DICHLOROPROPENE	1	U	1 UG/L
	AIB002EB1	EB	P-ISOPROPYL TOLUENE	1.2	U	1.2 UG/L
	AIB002EB1	EB	SEC-BUTYL BENZENE	1.3	U	1.3 UG/L
	AIB002EB1	EB	STYRENE	0.4	U	0.4 UG/L
	AIB002EB1	EB	TERT-BUTYL BENZENE	1.4	U	1.4 UG/L
	AIB002EB1	EB	TETRACHLOROETHENE	1.4	U	1.4 UG/L
	AIB002EB1	EB	TOLUENE	1.1	U	1.1 UG/L
	LABQC	LB	O-XYLENE	1.1	U	1.1 UG/L
	LABQC	LB	4-CHLOROTOLUENE	0.6	U	0.6 UG/L
	LABQC	LB	BROMOBENZENE	0.3	U	0.3 UG/L
	LABQC	LB	TOLUENE	1.1	U	1.1 UG/L
	LABQC	LB	NAPHTHALENE	0.4	U	0.4 UG/L
	LABQC	LB	ISOPROPYL BENZENE	0.5	U	0.5 UG/L
	LABQC	LB	2-CHLOROTOLUENE	0.4	U	0.4 UG/L
	LABQC	LB	TETRACHLOROETHENE	1.4	U	1.4 UG/L
	LABQC	LB	TRICHLOROFLUOROMETHANE	0.8	U	0.8 UG/L
	LABQC	LB	DICHLORODIFLUOROMETHANE	1	U	1 UG/L
	LABQC	LB	SEC-BUTYL BENZENE	1.3	U	1.3 UG/L
	LABQC	LB	2,2-DICHLOROPROPANE	3.5	U	3.5 UG/L
	LABQC	LB	TERT-BUTYL BENZENE	1.4	U	1.4 UG/L
	LABQC	LB	P-ISOPROPYL TOLUENE	1.2	U	1.2 UG/L
	LABQC	LB	BROMOCHLOROMETHANE	0.4	U	0.4 UG/L
	LABQC	LB	TRANS-1,3-DICHLOROPROPENE	1	U	1 UG/L
	LABQC	LB	DIBROMOMETHANE	2.4	U	2.4 UG/L
	LABQC	LB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2 UG/L
	LABQC	LB	STYRENE	0.4	U	0.4 UG/L
	LABQC	LB	HEXACHLOROBUTADIENE	1.1	U	1.1 UG/L
	LABQC	LB	TRICHLOROETHENE	1	U	1 UG/L
	LABQC	LB	CIS-1,3-DICHLOROPROPENE	1	U	1 UG/L
	LABQC	LB	M+P-XYLENE	1.3	U	1.3 UG/L
	LABQC	LB	BENZENE	0.4	U	0.4 UG/L
	LABQC	LB	CHLOROMETHANE	1.3	U	1.3 UG/L

SDG	Method	Field ID	QC Type	Analyte	Result	LabFlag	RL	Units
9804159	SW8220A	LABQC	LB	1-CHLOROHEXANE	0.5	U	0.5	UG/L
		LABQC	LB	1,4-DICHLOROBENZENE	0.3	U	0.3	UG/L
		LABQC	LB	N-PROPYLBENZENE	0.4	U	0.4	UG/L
		LABQC	LB	DIBROMOCHLOROMETHANE	0.5	U	0.5	UG/L
		LABQC	LB	BROMODICHLOROMETHANE	0.8	U	0.8	UG/L
		LABQC	LB	VINYL CHLORIDE	1.1	U	1.1	UG/L
		LABQC	LB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6	UG/L
		LABQC	LB	METHYLENE CHLORIDE	0.38		0.3	UG/L
		LABQC	LB	CHLOROBENZENE	0.4		0.4	UG/L
		LABQC	LB	N-BUTYLBENZENE	1.1		1.1	UG/L
		LABQC	LB	m,p-xylene	1.3		1.3	UG/L
		LABQC	LB	BROMOFORM	1.2		1.2	UG/L
		LABQC	LB	CHLOROFORM	0.3		0.3	UG/L
		LABQC	LB	BROMOMETHANE	1.1		1.1	UG/L
		LABQC	LB	ETHYLBENZENE	0.6		0.6	UG/L
		LABQC	LB	CARBON TETRACHLORIDE	2.1		2.1	UG/L
		LABQC	LB	CHLOROETHANE	1		1	UG/L
		LABQC	LB	1,2,4-TRIMETHYLBENZENE	1.3		1.3	UG/L
		LABQC	LB	1,1,1,2-TETRACHLOROETHANE	0.5		0.5	UG/L
		LABQC	LB	1,3-DICHLOROPROPANE	0.4		0.4	UG/L
		LABQC	LB	1,3,5-TRIMETHYLBENZENE	0.5		0.5	UG/L
		LABQC	LB	1,2-DICHLOROPROPANE	0.4		0.4	UG/L
		LABQC	LB	1,2-DICHLOROETHANE	0.6		0.6	UG/L
		LABQC	LB	1,2-DICHLOROBENZENE	0.3		0.3	UG/L
		LABQC	LB	1,2-DIBROMOETHANE	0.6		0.6	UG/L
		LABQC	LB	1,2-DIBROMO-3-CHLOROPROPANE	2.6		2.6	UG/L
		LABQC	LB	1,3-DICHLOROBENZENE	1.2		1.2	UG/L
		LABQC	LB	1,2,4-TRICHLOROBENZENE	0.4		0.4	UG/L
		LABQC	LB	1,2,3-TRICHLOROPROPANE	3.2		3.2	UG/L
		LABQC	LB	1,2,3-TRICHLOROBENZENE	0.3		0.3	UG/L
		LABQC	LB	1,1-DICHLOROPROPENE	1		1	UG/L
		LABQC	LB	1,1-DICHLOROETHENE	1.2		1.2	UG/L
		LABQC	LB	1,1-DICHLOROETHANE	0.4		0.4	UG/L

SDG	Method Field ID	QCType	Analyte	Result	LabFlag	RL Units
9804159	SW8260A LABQC	LB	1,1,2-TRICHLOROETHANE	1	U	1 UG/L
	LABQC	LB	1,1,1-TRICHLOROETHANE	0.8	U	0.8 UG/L
	LABQC	LB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4 UG/L
9804181	SW8260A AIB006TB1	TB	DIBROMOCHLOROMETHANE	0.5	U	0.5 UG/L
	AIB006TB1	TB	P-ISOPROPYL TOLUENE	1.2	U	1.2 UG/L
	AIB006TB1	TB	CHLOROBENZENE	0.4	U	0.4 UG/L
	AIB006TB1	TB	CHLOROETHANE	1	U	1 UG/L
	AIB006TB1	TB	CHLOROFORM	0.3	U	0.3 UG/L
	AIB006TB1	TB	CHLOROMETHANE	1.3	U	1.3 UG/L
	AIB006TB1	TB	CIS-1,3-DICHLOROPROPENE	1	U	1 UG/L
	AIB006TB1	TB	DI-BROMOMETHANE	2.4	U	2.4 UG/L
	AIB006TB1	TB	DICHLORODIFLUOROMETHANE	1	U	1 UG/L
	AIB006TB1	TB	ETHYL BENZENE	0.6	U	0.6 UG/L
	AIB006TB1	TB	HEXA-CHLOROBUTADIENE	1.1	U	1.1 UG/L
	AIB006TB1	TB	ISOPROPYL BENZENE	0.5	U	0.5 UG/L
	AIB006TB1	TB	m,p-xylene	1.3	U	1.3 UG/L
	AIB006TB1	TB	METHYLENE CHLORIDE	0.3	R,U	0.3 UG/L
	AIB006TB1	TB	CARBON TETRA-CHLORIDE	2.1	U	2.1 UG/L
	AIB006TB1	TB	O-XYLENE	1.1	U	1.1 UG/L
	AIB006TB1	TB	N-BUTYL BENZENE	1.1	U	1.1 UG/L
	AIB006TB1	TB	SEC-BUTYL BENZENE	1.3	U	1.3 UG/L
	AIB006TB1	TB	STYRENE	0.4	U	0.4 UG/L
	AIB006TB1	TB	TERT-BUTYL BENZENE	1.4	U	1.4 UG/L
	AIB006TB1	TB	TETRA-CHLOROETHENE	1.4	U	1.4 UG/L
	AIB006TB1	TB	TOLUENE	1.1	U	1.1 UG/L
	AIB006TB1	TB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6 UG/L
	AIB006TB1	TB	TRANS-1,3-DICHLOROPROPENE	1	U	1 UG/L
	AIB006TB1	TB	TRICHLOROETHENE	1	U	1 UG/L
	AIB006TB1	TB	TRICHLOROFLUOROMETHANE	0.8	U	0.8 UG/L
	AIB006TB1	TB	VINYL CHLORIDE	1.1	U	1.1 UG/L
	AIB006TB1	TB	1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5 UG/L
	AIB006TB1	TB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2 UG/L
	AIB006TB1	TB	N-PROPYL BENZENE	0.4	U	0.4 UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL Units
9804181	SW8260A	AIB006TB1	TB	1,2,4-TRIMETHYLBENZENE	1.3	U	1.3 UGL
		AIB006TB1	TB	1,1,1-TRICHLOROETHANE	0.8	U	0.8 UGL
		AIB006TB1	TB	NAPHTHALENE	0.4	U	0.4 UGL
		AIB006TB1	TB	BROMOMETHANE	1.1	U	1.1 UGL
		AIB006TB1	TB	1,1,2-TRICHLOROETHANE	1	U	1 UGL
		AIB006TB1	TB	1,1-DICHLOROETHANE	0.4	U	0.4 UGL
		AIB006TB1	TB	1,1-DICHLOROETHENE	1.2	U	1.2 UGL
		AIB006TB1	TB	1,1-DICHLOROPROPENE	1	U	1 UGL
		AIB006TB1	TB	1,2,3-TRICHLOROBENZENE	0.3	U	0.3 UGL
		AIB006TB1	TB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4 UGL
		AIB006TB1	TB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4 UGL
		AIB006TB1	TB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6 UGL
		AIB006TB1	TB	1,2-DIBROMOETHANE	0.6	U	0.6 UGL
		AIB006TB1	TB	1,2-DICHLOROBENZENE	0.3	U	0.3 UGL
		AIB006TB1	TB	1,2-DICHLOROETHANE	0.6	U	0.6 UGL
		AIB006TB1	TB	BROMOBENZENE	0.3	U	0.3 UGL
		AIB006TB1	TB	BROMOFORM	1.2	U	1.2 UGL
		AIB006TB1	TB	BROMODICHLOROMETHANE	0.8	U	0.8 UGL
		AIB006TB1	TB	1,2,3-TRICHLOROPROPANE	3.2	U	3.2 UGL
		AIB006TB1	TB	BROMOCHLOROMETHANE	0.4	R,U	0.4 UGL
		AIB006TB1	TB	1,2-DICHLOROPROPANE	0.4	U	0.4 UGL
		AIB006TB1	TB	BENZENE	0.4	U	0.4 UGL
		AIB006TB1	TB	4-CHLOROTOLUENE	0.6	U	0.6 UGL
		AIB006TB1	TB	2-CHLOROTOLUENE	0.4	U	0.4 UGL
		AIB006TB1	TB	1-CHLOROHEXANE	0.5	R,U	0.5 UGL
		AIB006TB1	TB	1,4-DICHLOROBENZENE	0.3	U	0.3 UGL
		AIB006TB1	TB	1,3-DICHLOROBENZENE	0.4	U	0.4 UGL
		AIB006TB1	TB	1,3,5-TRIMETHYLBENZENE	0.5	U	0.5 UGL
		AIB006TB1	TB	2,2-DICHLOROPROPANE	3.5	U	3.5 UGL
		AIB007EB1	EB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2 UGL
		AIB007EB1	EB	METHYLENE CHLORIDE	0.3	R,U	0.3 UGL
		AIB007EB1	EB	m,p-xylene	1.3	U	1.3 UGL

SDG	Method Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9804181	SW8260A	AIB007EB1	EB	ISOPROPYLBENZENE	0.5	U	0.5 UGL
	AIB007EB1	EB	HEXACHLOROBUTADIENE	1.1	U	1.1	UG/L
	AIB007EB1	EB	ETHYL BENZENE	0.6	U	0.6	UG/L
	AIB007EB1	EB	DICHLORODIFLUOROMETHANE	1	U	1	UG/L
	AIB007EB1	EB	DI(BROMOMETHANE)	2.4	U	2.4	UG/L
	AIB007EB1	EB	CHLOROMETHANE	1.3	U	1.3	UG/L
	AIB007EB1	EB	CIS-1,3-DICHLOROPROPENE	1	U	1	UG/L
	AIB007EB1	EB	CHLOROFORM	0.3	U	0.3	UG/L
	AIB007EB1	EB	CHLOROETHANE	1	U	1	UG/L
	AIB007EB1	EB	N-BUTYLBENZENE	1.1	U	1.1	UG/L
	AIB007EB1	EB	DI(BROMOCHLOROMETHANE)	0.5	U	0.5	UG/L
	AIB007EB1	EB	TETRA(CHLOROETHENE)	1.4	U	1.4	UG/L
	AIB007EB1	EB	1,1,1-TRICHLOROETHANE	0.8	U	0.8	UG/L
	AIB007EB1	EB	CHLOROBENZENE	0.4	U	0.4	UG/L
	AIB007EB1	EB	VINYL CHLORIDE	1.1	U	1.1	UG/L
	AIB007EB1	EB	TRICHLOROETHENE	1	U	1	UG/L
	AIB007EB1	EB	TRANS-1,3-DICHLOROPROPENE	1	U	1	UG/L
	AIB007EB1	EB	TRICHLOROFLUOROMETHANE	0.8	U	0.8	UG/L
	AIB007EB1	EB	TOLUENE	1.1	U	1.1	UG/L
	AIB007EB1	EB	N-PROPYLBENZENE	0.4	U	0.4	UG/L
	AIB007EB1	EB	TERT-BUTYL BENZENE	1.4	U	1.4	UG/L
	AIB007EB1	EB	STYRENE	0.4	U	0.4	UG/L
	AIB007EB1	EB	SEC-BUTYL BENZENE	1.3	U	1.3	UG/L
	AIB007EB1	EB	P-ISOPROPYL TOLUENE	1.2	U	1.2	UG/L
	AIB007EB1	EB	O-XYLENE	1.1	U	1.1	UG/L
	AIB007EB1	EB	NAPHTHALENE	0.4	U	0.4	UG/L
	AIB007EB1	EB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6	UG/L
	AIB007EB1	EB	1,3,5-TRIMETHYL BENZENE	0.5	U	0.5	UG/L
	AIB007EB1	EB	1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5	UG/L
	AIB007EB1	EB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4	UG/L
	AIB007EB1	EB	1,1-DICHLOROETHANE	0.4	U	0.4	UG/L
	AIB007EB1	EB	1,1-DICHLOROETHENE	1.2	U	1.2	UG/L
	AIB007EB1	EB	1,1-DICHLOROPROPENE	1	U	1	UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9804181	SW8260A	AIB007EB1	EB	1,2,3-TRICHLOROBENZENE	0.3	U	0.3	UG/L
		AIB007EB1	EB	1,2,3-TRICHLOROPROpane	3.2	U	3.2	UG/L
		AIB007EB1	EB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4	UG/L
		AIB007EB1	EB	1,2,4-TRIMETHYLBENZENE	1.3	U	1.3	UG/L
		AIB007EB1	EB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6	UG/L
		AIB007EB1	EB	1,2-DIBROMOETHANE	0.6	U	0.6	UG/L
		AIB007EB1	EB	1,2-DICHLOROBENZENE	0.3	U	0.3	UG/L
		AIB007EB1	EB	1,1,2-TRICHLOROETHANE	1	U	1	UG/L
		AIB007EB1	EB	1,2-DICHLOROPROPANE	0.4	U	0.4	UG/L
		AIB007EB1	EB	4-CHLOROTOLUENE	0.6	U	0.6	UG/L
		AIB007EB1	EB	BROMOMETHANE	1.1	U	1.1	UG/L
		AIB007EB1	EB	BROMOFORM	1.2	U	1.2	UG/L
		AIB007EB1	EB	BROMODICHLOROMETHANE	0.8	U	0.8	UG/L
		AIB007EB1	EB	BROMOCHLOROMETHANE	0.4	R,U	0.4	UG/L
		AIB007EB1	EB	1,2-DICHLOROETHANE	0.6	U	0.6	UG/L
		AIB007EB1	EB	BENZENE	0.4	U	0.4	UG/L
		AIB007EB1	EB	CARBON TETRACHLORIDE	2.1	U	2.1	UG/L
		AIB007EB1	EB	2-CHLOROTOLUENE	0.4	U	0.4	UG/L
		AIB007EB1	EB	2,2-DICHLOROPROPANE	3.5	U	3.5	UG/L
		AIB007EB1	EB	1-CHLOROHEXANE	0.5	R,U	0.5	UG/L
		AIB007EB1	EB	1,4-DICHLOROBENZENE	0.3	U	0.3	UG/L
		AIB007EB1	EB	1,3-DICHLOROPROPANE	0.4	U	0.4	UG/L
		AIB007EB1	EB	1,3-DICHLOROBENZENE	1.2	U	1.2	UG/L
		AIB007EB1	EB	BROMOBENZENE	0.3	U	0.3	UG/L
		AIB008AB1	AB	HEXAChLOROBUTADIENE	1.1	U	1.1	UG/L
		AIB008AB1	AB	NAPHTHALENE	0.4	U	0.4	UG/L
		AIB008AB1	AB	CHLOROBENZENE	0.4	U	0.4	UG/L
		AIB008AB1	AB	CHLOROETHANE	1	U	1	UG/L
		AIB008AB1	AB	CHLOROFORM	0.3	U	0.3	UG/L
		AIB008AB1	AB	CHLOROMETHANE	1.3	U	1.3	UG/L
		AIB008AB1	AB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2	UG/L
		AIB008AB1	AB	CIS-1,3-DICHLOROPROPENE	1	U	1	UG/L
		AIB008AB1	AB	DIBROMOCHLOROMETHANE	0.5	U	0.5	UG/L

SDG	Method Field ID	QCType	Analyte	Result	LabFlag	RL Units
9804181	SW8260A	AIB008AB1	AB	2.4	U	2.4 UGL
	AIB008AB1	AB	DIBROMOMETHANE	0.6	U	0.6 UGL
	AIB008AB1	AB	ETHYL BENZENE	0.5	U	0.5 UGL
	AIB008AB1	AB	ISOPROPYL BENZENE	1.3	U	1.3 UGL
	AIB008AB1	AB	m,p-xylene	0.3	R,U	0.3 UGL
	AIB008AB1	AB	METHYLENE CHLORIDE	2.1	U	2.1 UGL
	AIB008AB1	AB	CARBON TETRACHLORIDE	0.4	U	0.4 UGL
	AIB008AB1	AB	N-PROPYLBENZENE	1.4	U	1.4 UGL
	AIB008AB1	AB	TERT-BUTYL BENZENE	1.1	U	1.1 UGL
	AIB008AB1	AB	O-XYLENE	1.2	U	1.2 UGL
	AIB008AB1	AB	P-ISOPROPYL TOLUENE	1.3	U	1.3 UGL
	AIB008AB1	AB	SEC-BUTYL BENZENE	0.4	U	0.4 UGL
	AIB008AB1	AB	STYRENE	1.4	U	1.4 UGL
	AIB008AB1	AB	TETRACHLOROETHENE	0.6	U	0.6 UGL
	AIB008AB1	AB	TRANS-1,2-DICHLOROETHENE	1	U	1 UGL
	AIB008AB1	AB	TRANS-1,3-DICHLOROPROPENE	0.5	U	0.5 UGL
	AIB008AB1	AB	TRICHLOROETHENE	1	U	1 UGL
	AIB008AB1	AB	TRICHLOROFLUOROMETHANE	0.8	U	0.8 UGL
	AIB008AB1	AB	VINYL CHLORIDE	1.1	U	1.1 UGL
	AIB008AB1	AB	1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5 UGL
	AIB008AB1	AB	DICHLORODIFLUOROMETHANE	1	U	1 UGL
	AIB008AB1	AB	N-BUTYL BENZENE	1.1	U	1.1 UGL
	AIB008AB1	AB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6 UGL
	AIB008AB1	AB	TOLUENE	1.1	U	1.1 UGL
	AIB008AB1	AB	BROMOMETHANE	1.1	U	1.1 UGL
	AIB008AB1	AB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4 UGL
	AIB008AB1	AB	1,1,1-TRICHLOROETHANE	0.8	U	0.8 UGL
	AIB008AB1	AB	1,1,2-TRICHLOROETHANE	1	U	1 UGL
	AIB008AB1	AB	1,1-DICHLOROETHANE	0.4	U	0.4 UGL
	AIB008AB1	AB	1,1-DICHLOROPROPENE	1.2	U	1.2 UGL
	AIB008AB1	AB	1,2,3-TRICHLOROBENZENE	0.3	U	0.3 UGL
	AIB008AB1	AB	1,2,3-TRICHLOROPROPANE	3.2	U	3.2 UGL
	AIB008AB1	AB	1,2,4-TRIMETHYLBENZENE	1.3	U	1.3 UGL

652
781

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL Units
9804181	SW8260A	AIB008AB1	AB	1,2-DIBROMOETHANE	0.6	U	0.6 UGL
		AIB008AB1	AB	1,2-DICHLOROBENZENE	0.3	U	0.3 UGL
		AIB008AB1	AB	1,2-DICHLOROETHANE	0.6	U	0.6 UGL
		AIB008AB1	AB	2-CHLOROTOLUENE	0.4	U	0.4 UGL
		AIB008AB1	AB	BROMOFORM	1.2	U	1.2 UGL
		AIB008AB1	AB	BROMODICHLOROMETHANE	0.8	U	0.8 UGL
		AIB008AB1	AB	BROMOCHLOROMETHANE	0.4	R,U	0.4 UGL
		AIB008AB1	AB	BROMOBENZENE	0.3	U	0.3 UGL
		AIB008AB1	AB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4 UGL
		AIB008AB1	AB	4-CHLOROTOLUENE	0.6	U	0.6 UGL
		AIB008AB1	AB	1,2-DICHLOROPROpane	0.4	U	0.4 UGL
		AIB008AB1	AB	2,2-DICHLOROPROpane	3.5	U	3.5 UGL
		AIB008AB1	AB	1-CHLOROHEXANE	0.5	R,U	0.5 UGL
		AIB008AB1	AB	1,4-DICHLOROBENZENE	0.3	U	0.3 UGL
		AIB008AB1	AB	1,3-DICHLOROPROPANE	0.4	U	0.4 UGL
		AIB008AB1	AB	1,3-DICHLOROBENZENE	1.2	U	1.2 UGL
		AIB008AB1	AB	1,3,5-TRIMETHYLBENZENE	0.5	U	0.5 UGL
		AIB008AB1	AB	BENZENE	0.4	U	0.4 UGL
	LABQC	LB		DIBROMOCHLOROMETHANE	0.5	U	0.5 UGL
	LABQC	LB		2-CHLOROTOLUENE	0.4	U	0.4 UGL
	LABQC	LB		BROMOFORM	1.2	U	1.2 UGL
	LABQC	LB		P-ISOPROPYLTOluENE	1.2	U	1.2 UGL
	LABQC	LB		TETRACHLOROETHENE	1.4	U	1.4 UGL
	LABQC	LB		m,p-xylene	1.3	U	1.3 UGL
	LABQC	LB		TRICHLOROETHENE	1	U	1 UGL
	LABQC	LB		SEC-BUTYLBENZENE	1.3	U	1.3 UGL
	LABQC	LB		1,4-DICHLOROBENZENE	0.3	U	0.3 UGL
	LABQC	LB		N-BUTYLBENZENE	1.1	U	1.1 UGL
	LABQC	LB		TRANS-1,3-DICHLOROPROPENE	1	U	1 UGL
	LABQC	LB		O-XYLENE	1.1	U	1.1 UGL
	LABQC	LB		TERT-BUTYLBENZENE	1.4	U	1.4 UGL
	LABQC	LB		BROMOBENZENE	0.3	U	0.3 UGL
	LABQC	LB		N-PROPYLBENZENE	0.4	U	0.4 UGL

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9804181	SW8260A	LABQC	LB	VINYL CHLORIDE	1.1	U	1.1	UG/L
		LABQC	LB	4-CHLORTOTOLUENE	0.6	U	0.6	UG/L
		LABQC	LB	DI(BROMOMETHANE)	2.4	U	2.4	UG/L
		LABQC	LB	CHLOROMETHANE	1.3	U	1.3	UG/L
		LABQC	LB	ISOPROPYLBENZENE	0.5	U	0.5	UG/L
		LABQC	LB	BROMOMETHANE	1.1	U	1.1	UG/L
		LABQC	LB	BENZENE	0.4	U	0.4	UG/L
		LABQC	LB	METHYLENE CHLORIDE	1.1	R	0.3	UG/L
		LABQC	LB	CHLOROFORM	0.3	U	0.3	UG/L
		LABQC	LB	DICHLORODIFLUOROMETHANE	1	U	1	UG/L
		LABQC	LB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2	UG/L
		LABQC	LB	TOLUENE	1.1	U	1.1	UG/L
		LABQC	LB	STYRENE	0.4	U	0.4	UG/L
		LABQC	LB	CIS-1,3-DICHLOROPROPENE	1	U	1	UG/L
		LABQC	LB	NAPHTHALENE	0.4	U	0.4	UG/L
		LABQC	LB	1-CHLOROHEXANE	0.5	R,U	0.5	UG/L
		LABQC	LB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6	UG/L
		LABQC	LB	ETHYL BENZENE	0.6	U	0.6	UG/L
		LABQC	LB	TRICHLOROFLUOROMETHANE	0.8	U	0.8	UG/L
		LABQC	LB	CHLOROETHANE	1	U	1	UG/L
		LABQC	LB	CHLOROBENZENE	0.4	U	0.4	UG/L
		LABQC	LB	HEXACHLOROBUTADIENE	1.1	U	1.1	UG/L
		LABQC	LB	BROMOCHLOROMETHANE	0.4	R,U	0.4	UG/L
		LABQC	LB	BROMODICHLOROMETHANE	0.8	U	0.8	UG/L
		LABQC	LB	2,2-DICHLOROPROpane	3.5	U	3.5	UG/L
		LABQC	LB	CARBON TETRACHLORIDE	2.1	U	2.1	UG/L
		LABQC	LB	1,3-DICHLOROBENZENE	1.2	U	1.2	UG/L
		LABQC	LB	1,3-DICHLOROPROPANE	0.4	U	0.4	UG/L
		LABQC	LB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6	UG/L
		LABQC	LB	1,3,5-TRIMETHYLBENZENE	0.5	U	0.5	UG/L
		LABQC	LB	1,2-DICHLOROPROPANE	0.4	U	0.4	UG/L
		LABQC	LB	1,2-DICHLOROETHANE	0.6	U	0.6	UG/L
		LABQC	LB	1,1-DICHLOROPROPENE	1	U	1	UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9804181	SW8260A	LABQC	LB	1,2-DICHLOROBENZENE	0.3	U	0.3	UG/L
	LABQC	LB	1,2-DIBROMOETHANE	0.6	U		0.6	UG/L
	LABQC	LB	1,2,4-TRICHLOROBENZENE	0.4	U		0.4	UG/L
	LABQC	LB	1,2,3-TRICHLOROBENZENE	0.3	U		0.3	UG/L
	LABQC	LB	1,1-DICHLOROETHENE	1.2	U		1.2	UG/L
	LABQC	LB	1,1-DICHLOROETHANE	0.4	U		0.4	UG/L
	LABQC	LB	1,1,2-TRICHLOROETHANE	1	U		1	UG/L
	LABQC	LB	1,1,2,2-TETRACHLOROETHANE	0.4	U		0.4	UG/L
	LABQC	LB	1,1,1-TRICHLOROETHANE	0.8	U		0.8	UG/L
	LABQC	LB	1,1,1,2-TETRACHLOROETHANE	0.5	U		0.5	UG/L
	LABQC	LB	1,2,3-TRICHLOROPROPANE	3.2	U		3.2	UG/L
	LABQC	LB	1,2,4-TRIMETHYLBENZENE	1.3	U		1.3	UG/L
9804186	E310.1	AIB018EB1	BB	TOTAL ALKALINITY AS CACO3	22		5	MG/L
	SW6010B	AIB018EB1	BB	ALUMINUM	44.2	U	44.2	UG/L
	AIB018EB1	BB	CALCIUM	187		104	UG/L	
	AIB018EB1	BB	IRON	8	U	8	UG/L	
	AIB018EB1	BB	MAGNESIUM	95.4	U	95.4	UG/L	
	AIB018EB1	BB	POTASSIUM	69.9	U	69.9	UG/L	
	AIB018EB1	BB	SODIUM	60.5	U	60.5	UG/L	
	AIB018EB1	BB	LEAD	31.2	U	31.2	UG/L	
	PBW	lb	IRON	-28.14	F	8	UG/L	
	PBW	lb	IRON	153.33		8	UG/L	
	PBW	lb	LEAD	31.2	U	31.2	UG/L	
	PBW	lb	ALUMINUM	44.2	U	44.2	UG/L	
	PBW	lb	CALCIUM	104	U	104	UG/L	
	PBW	lb	MAGNESIUM	95.4	U	95.4	UG/L	
	PBW	lb	POTASSIUM	69.9	U	69.9	UG/L	
	PBW	lb	SODIUM	60.5	U	60.5	UG/L	
SW8260A	AIB017TB1	TB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6	UG/L	
	AIB017TB1	TB	N-PROPYLBENZENE	0.4	U	0.4	UG/L	
	AIB017TB1	TB	NAPHTHALENE	0.4	U	0.4	UG/L	
	AIB017TB1	TB	O-XYLENE	1.1	U	1.1	UG/L	
	AIB017TB1	TB	P-ISOPROPYL TOLUENE	1.2	U	1.2	UG/L	

SDG	Method Field ID	QCType	Analyte	Result	LabFlag	RL Units
9804186	SW8260A	AIB017TB1	SEC-BUTYLBENZENE	1.3	U	1.3 UGL
	AIB017TB1	TB	STYRENE	0.4	U	0.4 UGL
	AIB017TB1	TB	TERT-BUTYLBENZENE	1.4	U	1.4 UGL
	AIB017TB1	TB	1,2-DICHLOROETHANE	0.6	U	0.6 UGL
	AIB017TB1	TB	TOLUENE	1.1	U	1.1 UGL
	AIB017TB1	TB	TRANS-1,3-DICHLOROPROPENE	1	U	1 UGL
	AIB017TB1	TB	TRICHLOROETHENE	1	U	1 UGL
	AIB017TB1	TB	TRICHLOROFLUOROMETHANE	0.8	U	0.8 UGL
	AIB017TB1	TB	VINYL CHLORIDE	1.1	U	1.1 UGL
	AIB017TB1	TB	N-BUTYLBENZENE	1.1	U	1.1 UGL
	AIB017TB1	TB	TETRACHLOROETHENE	1.4	U	1.4 UGL
	AIB017TB1	TB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4 UGL
	AIB017TB1	TB	1,3,5-TRIMETHYLBENZENE	0.5	R,U	0.5 UGL
	AIB017TB1	TB	1-CHLOROHEXANE	0.5	R,U	0.5 UGL
	AIB017TB1	TB	1,4-DICHLOROBENZENE	0.3	U	0.3 UGL
	AIB017TB1	TB	1,3-DICHLOROPROPANE	0.4	U	0.4 UGL
	AIB017TB1	TB	1,3-DICHLOROBENZENE	1.2	U	1.2 UGL
	AIB017TB1	TB	1,2-DICHLOROPROPANE	0.4	U	0.4 UGL
	AIB017TB1	TB	1,2-DICHLOROBENZENE	0.3	U	0.3 UGL
	AIB017TB1	TB	1,2-DIBROMOETHANE	0.6	U	0.6 UGL
	AIB017TB1	TB	2-CHLOROTOLUENE	0.4	U	0.4 UGL
	AIB017TB1	TB	1,2,4-TRIMETHYLBENZENE	1.3	U	1.3 UGL
	AIB017TB1	TB	4-CHLOROTOLUENE	0.6	U	0.6 UGL
	AIB017TB1	TB	1,2,3-TRICHLOROPROPANE	3.2	U	3.2 UGL
	AIB017TB1	TB	1,2,3-TRICHLOROBENZENE	0.3	U	0.3 UGL
	AIB017TB1	TB	1,1-DICHLOROPROPENE	1	U	1 UGL
	AIB017TB1	TB	1,1-DICHLOROETHENE	1.2	U	1.2 UGL
	AIB017TB1	TB	1,1-DICHLOROETHANE	0.4	U	0.4 UGL
	AIB017TB1	TB	1,1,2-TRICHLOROETHANE	1	U	1 UGL
	AIB017TB1	TB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4 UGL
	AIB017TB1	TB	1,1,1-TRICHLOROETHANE	0.8	U	0.8 UGL
	AIB017TB1	TB	1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5 UGL
	AIB017TB1	TB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6 UGL

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9804186	SW8260A	AIB017TB1	TB	CHLOROETHANE	1	U	1	UG/L
	AIB017TB1	TB	m,p-xylene		1.3	U	1.3	UG/L
	AIB017TB1	TB	ISOPROPYLBENZENE	0.5	U	0.5	UG/L	
	AIB017TB1	TB	HEXACHLOROBUTADIENE	1.1	U	1.1	UG/L	
	AIB017TB1	TB	ETHYLBENZENE	0.6	U	0.6	UG/L	
	AIB017TB1	TB	DICHLORODIFLUOROMETHANE	1	U	1	UG/L	
	AIB017TB1	TB	DI(BROMOMETHANE)	2.4	U	2.4	UG/L	
	AIB017TB1	TB	DI(BROMOCHLOROMETHANE)	0.5	U	0.5	UG/L	
	AIB017TB1	TB	CIS-1,3-DICHLOROPROPENE	1	U	1	UG/L	
	AIB017TB1	TB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2	UG/L	
	AIB017TB1	TB	2,2-DICHLOROPROPANE	3.5	U	3.5	UG/L	
	AIB017TB1	TB	CHLOROFORM	0.3	U	0.3	UG/L	
	AIB017TB1	TB	METHYLENE CHLORIDE	1.9	R	0.3	UG/L	
	AIB017TB1	TB	CHLOROBENZENE	0.4	U	0.4	UG/L	
	AIB017TB1	TB	CARBON TETRACHLORIDE	2.1	U	2.1	UG/L	
	AIB017TB1	TB	BROMOMETHANE	1.1	U	1.1	UG/L	
	AIB017TB1	TB	BROMOFORM	1.2	U	1.2	UG/L	
	AIB017TB1	TB	BROMODICHLOROMETHANE	0.8	U	0.8	UG/L	
	AIB017TB1	TB	BROMOCHLOROMETHANE	0.4	R,U	0.4	UG/L	
	AIB017TB1	TB	BROMOBENZENE	0.3	U	0.3	UG/L	
	AIB017TB1	TB	BENZENE	0.4	U	0.4	UG/L	
	AIB017TB1	TB	CHLOROMETHANE	1.3	U	1.3	UG/L	
	AIB018EB1	EB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4	UG/L	
	AIB018EB1	EB	NAPHTHALENE	0.4	U	0.4	UG/L	
	AIB018EB1	EB	CHLOROFORM	0.3	U	0.3	UG/L	
	AIB018EB1	EB	CHLOROMETHANE	1.3	U	1.3	UG/L	
	AIB018EB1	EB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2	UG/L	
	AIB018EB1	EB	CIS-1,3-DICHLOROPROPENE	1	U	1	UG/L	
	AIB018EB1	EB	DI(BROMOMETHANE)	0.5	U	0.5	UG/L	
	AIB018EB1	EB	DICHLORODIFLUOROMETHANE	2.4	U	2.4	UG/L	
	AIB018EB1	EB	ETHYLBENZENE	0.6	U	0.6	UG/L	
	AIB018EB1	EB	HEXACHLOROBUTADIENE	1.1	U	1.1	UG/L	

SDG	Method Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9804186	SW8260A	AIB018EB1	EB	ISOPROPYLBENZENE	0.5	U	0.5 UGL
	AIB018EB1	EB	m,p-xylene	1.3	U	1.3	UG/L
	AIB018EB1	EB	METHYLENE CHLORIDE	0.52	R	0.3	UG/L
	AIB018EB1	EB	CHLOROETHANE	1	U	1	UG/L
	AIB018EB1	EB	N-PROPYLBENZENE	0.4	U	0.4	UG/L
	AIB018EB1	EB	TRICHLOROFLUOROMETHANE	0.8	U	0.8	UG/L
	AIB018EB1	EB	O-XYLENE	1.1	U	1.1	UG/L
	AIB018EB1	EB	P-ISOPROPYLTOLUENE	1.2	U	1.2	UG/L
	AIB018EB1	EB	SEC-BUTYLBENZENE	1.3	U	1.3	UG/L
	AIB018EB1	EB	STYRENE	0.4	U	0.4	UG/L
	AIB018EB1	EB	TERT-BUTYLBENZENE	1.4	U	1.4	UG/L
	AIB018EB1	EB	TETRACHLOROETHENE	1.4	U	1.4	UG/L
	AIB018EB1	EB	TOLUENE	1.1	U	1.1	UG/L
	AIB018EB1	EB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6	UG/L
	AIB018EB1	EB	TRANS-1,3-DICHLOROPROPENE	1	U	1	UG/L
	AIB018EB1	EB	TRICHLOROETHENE	1	U	1	UG/L
	AIB018EB1	EB	VINYL CHLORIDE	1.1	U	1.1	UG/L
	AIB018EB1	EB	1,1,1-TRICHLOROETHANE	0.8	U	0.8	UG/L
	AIB018EB1	EB	1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5	UG/L
	AIB018EB1	EB	N-BUTYLBENZENE	1.1	U	1.1	UG/L
	AIB018EB1	EB	1,2,3-TRICHLOROBENZENE	0.3	U	0.3	UG/L
	AIB018EB1	EB	CHLOROBENZENE	0.4	U	0.4	UG/L
	AIB018EB1	EB	1,1,2-TRICHLOROETHANE	1	U	1	UG/L
	AIB018EB1	EB	1,1-DICHLOROETHANE	0.4	U	0.4	UG/L
	AIB018EB1	EB	1,1-DICHLOROETHENE	1.2	U	1.2	UG/L
	AIB018EB1	EB	1,1-DICHLOROPROPENE	1	U	1	UG/L
	AIB018EB1	EB	1,2,3-TRICHLOROPROPANE	3.2	U	3.2	UG/L
	AIB018EB1	EB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4	UG/L
	AIB018EB1	EB	1,2,4-TRIMETHYLBENZENE	1.3	U	1.3	UG/L
	AIB018EB1	EB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6	UG/L
	AIB018EB1	EB	1,2-DIBROMOETHANE	0.6	U	0.6	UG/L
	AIB018EB1	EB	1,2-DICHLOROBENZENE	0.3	U	0.3	UG/L
	AIB018EB1	EB	1,2-DICHLOROETHANE	0.6	U	0.6	UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL Units
9804186	SW8260A	AIB018EB1	EB	1,2-DICHLOROPROpane	0.4	U	0.4 UGL
		AIB018EB1	EB	1,3,5-TRIMETHYLBENZENE	0.5	R,U	0.5 UGL
		AIB018EB1	EB	BROMODICHLOROMETHANE	0.8	U	0.8 UGL
		AIB018EB1	EB	CARBON TETRACHLORIDE	2.1	U	2.1 UGL
		AIB018EB1	EB	1,3-DICHLOROBENZENE	1.2	U	1.2 UGL
		AIB018EB1	EB	BROMOFORM	1.2	U	1.2 UGL
		AIB018EB1	EB	BROMOMETHANE	1.1	U	1.1 UGL
		AIB018EB1	EB	BROMOCHLOROMETHANE	0.4	R,U	0.4 UGL
		AIB018EB1	EB	BROMOBENZENE	0.3	U	0.3 UGL
		AIB018EB1	EB	4-CHLOROTOLUENE	0.6	U	0.6 UGL
		AIB018EB1	EB	2-CHLOROTOLUENE	0.4	U	0.4 UGL
		AIB018EB1	EB	2,2-DICHLOROPROpane	3.5	U	3.5 UGL
		AIB018EB1	EB	1-CHLOROHEXANE	0.5	R,U	0.5 UGL
		AIB018EB1	EB	1,3-DICHLOROPROpane	0.4	U	0.4 UGL
		AIB018EB1	EB	BENZENE	0.4	U	0.4 UGL
		AIB018EB1	EB	1,4-DICHLOROBENZENE	0.3	U	0.3 UGL
	LABQC	LB	SEC-BUTYLBENZENE	1.3	U	1.3 UGL	
	LABQC	LB	BENZENE	0.4	U	0.4 UGL	
	LABQC	LB	CHLOROBENZENE	0.4	U	0.4 UGL	
	LABQC	LB	CARBON TETRACHLORIDE	2.1	U	2.1 UGL	
	LABQC	LB	m,p-xylene	1.3	U	1.3 UGL	
	LABQC	LB	2-CHLOROTOLUENE	0.4	U	0.4 UGL	
	LABQC	LB	HEXACHLOROBUTADIENE	1.1	U	1.1 UGL	
	LABQC	LB	ISOPROPYLBENZENE	0.5	R,U	0.5 UGL	
	LABQC	LB	CHLOROETHANE	1	U	1 UGL	
	LABQC	LB	BROMOMETHANE	1.1	U	1.1 UGL	
	LABQC	LB	TETRACHLOROETHENE	1.4	U	1.4 UGL	
	LABQC	LB	METHYLENECHLORIDE	0.49	R	0.3 UGL	
	LABQC	LB	TRANS,1,2-DICHLOROETHENE	0.6	U	0.6 UGL	
	LABQC	LB	METHYLENECHLORIDE	0.38	R	0.3 UGL	
	LABQC	LB	N-BUTYLBENZENE	1.1	U	1.1 UGL	
	LABQC	LB	STYRENE	0.4	U	0.4 UGL	
	LABQC	LB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2 UGL	

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL Units
9804186	SW8260A	LABQC	LB	DIBROMOMETHANE	2.4	U	2.4 UGL
		LABQC	LB	VINYL CHLORIDE	1.1	U	1.1 UGL
		LABQC	LB	4-CHLORTOTOLUENE	0.6	U	0.6 UGL
		LABQC	LB	1-CHLOROHEXANE	0.5	R,U	0.5 UGL
		LABQC	LB	DICHLORODIFLUOROMETHANE	1	R,U	1 UGL
		LABQC	LB	2,2-DICHLOROPROPANE	3.5	U	3.5 UGL
		LABQC	LB	VINYL CHLORIDE	1.1	R,U	1.1 UGL
		LABQC	LB	DICHLORODIFLUOROMETHANE	1	U	1 UGL
		LABQC	LB	CIS-1,3-DICHLOROPROPENE	1	U	1 UGL
		LABQC	LB	TERT-BUTYL BENZENE	1.4	U	1.4 UGL
		LABQC	LB	P-ISOPROPYL TOLUENE	1.2	U	1.2 UGL
		LABQC	LB	BROMOBENZENE	0.3	U	0.3 UGL
		LABQC	LB	BROMOFORM	1.2	U	1.2 UGL
		LABQC	LB	CHLOROFORM	0.3	U	0.3 UGL
		LABQC	LB	TOLUENE	1.1	U	1.1 UGL
		LABQC	LB	NAPHTHALENE	0.4	U	0.4 UGL
		LABQC	LB	CHLOROMETHANE	1.3	R,U	1.3 UGL
		LABQC	LB	BROMOCHLOROMETHANE	0.4	R,U	0.4 UGL
		LABQC	LB	NAPHTHALENE	0.4	R,U	0.4 UGL
		LABQC	LB	TRANS-1,3-DICHLOROPROPENE	1	U	1 UGL
		LABQC	LB	CHLOROMETHANE	1.3	U	1.3 UGL
		LABQC	LB	1,4-DICHLOROBENZENE	0.3	U	0.3 UGL
		LABQC	LB	ETHYL BENZENE	0.6	U	0.6 UGL
		LABQC	LB	O-XYLENE	1.1	U	1.1 UGL
		LABQC	LB	N-PROPYLBENZENE	0.4	U	0.4 UGL
		LABQC	LB	TRICHLOROETHENE	1	U	1 UGL
		LABQC	LB	TRICHLOROFLUOROMETHANE	0.8	U	0.8 UGL
		LABQC	LB	DIBROMOCHLOROMETHANE	0.5	U	0.5 UGL
		LABQC	LB	ISOPROPYLBENZENE	0.5	U	0.5 UGL
		LABQC	LB	BROMODICHLOROMETHANE	0.8	U	0.8 UGL
		LABQC	LB	1,3,5-TRIMETHYLBENZENE	0.5	R,U	0.5 UGL
		LABQC	LB	1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5 UGL
		LABQC	LB	1,1,1-TRICHLOROETHANE	0.8	U	0.8 UGL

SDG	Method	Field ID	QC Type	Analyte	Result	LabFlag	RL	Units
9804186	SW8260A	LABQC	LB	1,2-DIBROMOETHANE	0.6	U	0.6	UG/L
		LABQC	LB	1,3-DICHLOROPROpane	0.4	U	0.4	UG/L
		LABQC	LB	1,2-DICHLOROPROpane	0.4	U	0.4	UG/L
		LABQC	LB	1,3,5-TRIMETHYLBENZENE	0.5	U	0.5	UG/L
		LABQC	LB	1,2-DIBROMOETHANE	0.6	R,U	0.6	UG/L
		LABQC	LB	1,2-DICHLOROETHANE	0.6	U	0.6	UG/L
		LABQC	LB	1,3-DICHLOROBENZENE	1.2	U	1.2	UG/L
		LABQC	LB	1,2-DIBROMO-3-CHLOROPROpane	2.6	U	2.6	UG/L
		LABQC	LB	1,2,4-TRIMETHYLBENZENE	1.3	U	1.3	UG/L
		LABQC	LB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4	UG/L
		LABQC	LB	1,2,3-TRICHLOROPROPANE	3.2	U	3.2	UG/L
		LABQC	LB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4	UG/L
		LABQC	LB	1,1-DICHLOROPROPENE	1	U	1	UG/L
		LABQC	LB	1,1-DICHLOROETHENE	1.2	U	1.2	UG/L
		LABQC	LB	1,1-DICHLOROETHANE	0.4	U	0.4	UG/L
		LABQC	LB	1,1,2-TRICHLOROETHANE	1	U	1	UG/L
		LABQC	LB	1,2-DICHLOROBENZENE	0.3	U	0.3	UG/L
		LABQC	LB	1,2,3-TRICHLOROBENZENE	0.3	U	0.3	UG/L
SW9056	AIB018EB1	EB	NITRATE	0.1	U	0.1	MGL	0.1 MGL
	AIB018EB1	EB	BROMIDE	0.1	U	0.1	MGL	0.1 MGL
	AIB018EB1	EB	SULFATE	0.5	U	0.5	MGL	0.5 MGL
	AIB018EB1	EB	NITRITE	0.4	U	0.4	MGL	0.4 MGL
	AIB018EB1	EB	FLUORIDE	0.2	U	0.2	MGL	0.2 MGL
	AIB018EB1	EB	CHLORIDE	0.2	U	0.2	MGL	0.2 MGL
	AIB018EB1	EB	ORTHOPHOSPHATE	0.1	U	0.1	MGL	0.1 MGL
	LABQC	LB	CHLORIDE	0.2	U	0.2	MGL	0.2 MGL
	LABQC	LB	ORTHOPHOSPHATE	0.1	U	0.1	MGL	0.1 MGL
	LABQC	LB	NITRITE	0.4	U	0.4	MGL	0.4 MGL
	LABQC	LB	NITRATE	0.1	U	0.1	MGL	0.1 MGL
	LABQC	LB	BROMIDE	0.1	U	0.1	MGL	0.1 MGL
	LABQC	LB	FLUORIDE	0.2	U	0.2	MGL	0.2 MGL
	LABQC	LB	SULFATE	0.5	U	0.5	MGL	0.5 MGL
SW9060	AIB018EB1	EB	TOTAL ORGANIC CARBON	1	ND	1	MGL	1 MGL

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9804186	SW9060	LABQC	LB	TOTAL ORGANIC CARBON	1	ND	1	MG/L
9804214	E310.1	AIB031EB1	EB	TOTAL ALKALINITY AS CACO3	15		5	MG/L
	EPA300.0	LABQC	LB	SULFATE	0.2	U	0.2	MG/L
	LABQC	LB	NITRITE	0.4	U	0.4	MG/L	
	LABQC	LB	NITRATE	0.1	U	0.1	MG/L	
	LABQC	LB	FLUORIDE	0.2	U	0.2	MG/L	
	LABQC	LB	CHLORIDE	0.2	U	0.2	MG/L	
	SW6010B	AIB031EB1	EB	MAGNESIUM	95.4	U	95.4	UG/L
	AIB031EB1	EB	LEAD	31.2	U	31.2	UG/L	
	AIB031EB1	EB	IRON	8	U	8	UG/L	
	AIB031EB1	EB	CALCIUM	104	U	104	UG/L	
	AIB031EB1	EB	ALUMINUM	44.2	U	44.2	UG/L	
	AIB031EB1	EB	POTASSIUM	69.9	U	69.9	UG/L	
	AIB031EB1	EB	SODIUM	60.5	U	60.5	UG/L	
	PBW	Ib	LEAD	31.2	U	31.2	UG/L	
	PBW	Ib	SODIUM	60.5	U	60.5	UG/L	
	PBW	Ib	CALCIUM	104	U	104	UG/L	
	PBW	Ib	IRON	-28.14	B	8	UG/L	
	PBW	Ib	MAGNESIUM	95.4	U	95.4	UG/L	
	PBW	Ib	POTASSIUM	69.9	U	69.9	UG/L	
	PBW	Ib	ALUMINUM	44.2	U	44.2	UG/L	
	SW8260A	AIB029TB1	TB	TRICHLOROFLUOROMETHANE	0.8	U	0.8	UG/L
	AIB029TB1	TB	P-ISOPROPYL TOLUENE	1.2	U	1.2	UG/L	
	AIB029TB1	TB	SEC-BUTYL BENZENE	1.3	U	1.3	UG/L	
	AIB029TB1	TB	STYRENE	0.4	U	0.4	UG/L	
	AIB029TB1	TB	TERT-BUTYL BENZENE	1.4	U	1.4	UG/L	
	AIB029TB1	TB	TETRACHLOROETHENE	1.4	U	1.4	UG/L	
	AIB029TB1	TB	TOLUENE	1.1	U	1.1	UG/L	
	AIB029TB1	TB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6	UG/L	
	AIB029TB1	TB	TRICHLOROETHENE	1	U	1	UG/L	
	AIB029TB1	TB	VINYL CHLORIDE	1.1	U	1.1	UG/L	
	AIB029TB1	TB	1-CHLOROHEXANE	0.5	R,U	0.5	UG/L	
	AIB029TB1	TB	O-XYLENE	1.1	U	1.1	UG/L	

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9804214	SW8260A	AIB029TB1	TB	TRANS-1,3-DICHLOROPROPENE	1	U	1	UG/L
		AIB029TB1	TB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4	UG/L
		AIB029TB1	TB	2,2-DICHLOROPROpane	3.5	U	3.5	UG/L
		AIB029TB1	TB	1,4-DICHLOROBENZENE	0.3	U	0.3	UG/L
		AIB029TB1	TB	NAPHTHALENE	0.4	U	0.4	UG/L
		AIB029TB1	TB	1,3-DICHLOROBENZENE	1.2	U	1.2	UG/L
		AIB029TB1	TB	2-CHLOROTOLUENE	0.4	U	0.4	UG/L
		AIB029TB1	TB	1,2-DICHLOROPROpane	0.4	U	0.4	UG/L
		AIB029TB1	TB	1,2-DICHLOROETHANE	0.6	U	0.6	UG/L
		AIB029TB1	TB	1,2-DICHLOROBENZENE	0.3	U	0.3	UG/L
		AIB029TB1	TB	1,2-DIBROMOETHANE	0.6	U	0.6	UG/L
		AIB029TB1	TB	4-CHLOROTOLUENE	0.6	U	0.6	UG/L
		AIB029TB1	TB	1,2,4-TRIMETHYLBENZENE	1.3	U	1.3	UG/L
		AIB029TB1	TB	1,3-DICHLOROPROpane	0.4	U	0.4	UG/L
		AIB029TB1	TB	1,2,3-TRICHLOROPROpane	3.2	U	3.2	UG/L
		AIB029TB1	TB	1,2,3-TRICHLOROBENZENE	0.3	U	0.3	UG/L
		AIB029TB1	TB	1,1-DICHLOROPROPENE	1	U	1	UG/L
		AIB029TB1	TB	1,1-DICHLOROETHENE	1.2	U	1.2	UG/L
		AIB029TB1	TB	1,1-DICHLOROETHANE	0.4	U	0.4	UG/L
		AIB029TB1	TB	1,1,2-TRICHLOROETHANE	1	U	1	UG/L
		AIB029TB1	TB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4	UG/L
		AIB029TB1	TB	1,1,1-TRICHLOROETHANE	0.8	U	0.8	UG/L
		AIB029TB1	TB	1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5	UG/L
		AIB029TB1	TB	1,2-DIBROMO-3-CHLOROPROpane	2.6	U	2.6	UG/L
		AIB029TB1	TB	DICHLORODIFLUOROMETHANE	1	R,U	1	UG/L
		AIB029TB1	TB	N-PROPYLBENZENE	0.4	U	0.4	UG/L
		AIB029TB1	TB	N-BUTYL BENZENE	1.1	U	1.1	UG/L
		AIB029TB1	TB	METHYLENE CHLORIDE	1.6	R,B	0.3	UG/L
		AIB029TB1	TB	m,p-xylene	1.3	U	1.3	UG/L
		AIB029TB1	TB	ISOPROPYL BENZENE	0.5	U	0.5	UG/L
		AIB029TB1	TB	1,3,5-TRIMETHYLBENZENE	0.5	U	0.5	UG/L
		AIB029TB1	TB	ETHYL BENZENE	0.6	U	0.6	UG/L
		AIB029TB1	TB	BENZENE	0.4	U	0.4	UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL Units
9804214	SW3260A	AIB029TBI	TB	DI(BROMOMETHANE)	2.4	U	2.4 UGL
		AIB029TBI	TB	DI(BROMOCHLOROMETHANE)	0.5	U	0.5 UGL
		AIB029TBI	TB	CIS-1,3-DICHLOROPROPENE	1	U	1 UGL
		AIB029TBI	TB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2 UGL
		AIB029TBI	TB	BROMODICHLOROMETHANE	0.8	U	0.8 UGL
		AIB029TBI	TB	HEXACHLOROBUTADIENE	1.1	U	1.1 UGL
		AIB029TBI	TB	CHLOROMETHANE	1.3	U	1.3 UGL
		AIB029TBI	TB	BROMOCHLOROMETHANE	0.4	R,U	0.4 UGL
		AIB029TBI	TB	BROMOBENZENE	0.3	U	0.3 UGL
		AIB029TBI	TB	BROMOFORM	1.2	U	1.2 UGL
		AIB029TBI	TB	BROMOMETHANE	1.1	U	1.1 UGL
		AIB029TBI	TB	CARBON TETRACHLORIDE	2.1	U	2.1 UGL
		AIB029TBI	TB	CHLOROBENZENE	0.4	U	0.4 UGL
		AIB029TBI	TB	CHLOROETHANE	1	U	1 UGL
		AIB029TBI	TB	CHLOROFORM	0.3	U	0.3 UGL
		AIB030ABI	AB	TOLUENE	1.1	U	1.1 UGL
		AIB030ABI	AB	SEC-BUTYLBENZENE	1.3	U	1.3 UGL
		AIB030ABI	AB	STYRENE	0.4	U	0.4 UGL
		AIB030ABI	AB	TERT-BUTYLBENZENE	1.4	U	1.4 UGL
		AIB030ABI	AB	TETRA(CHLOROETHENE	1.4	U	1.4 UGL
		AIB030ABI	AB	P-ISOPROPYL TOLUENE	1.2	U	1.2 UGL
		AIB030ABI	AB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6 UGL
		AIB030ABI	AB	TRANS-1,3-DICHLOROPROPENE	1	U	1 UGL
		AIB030ABI	AB	TRICHLOROETHENE	1	U	1 UGL
		AIB030ABI	AB	VINYL CHLORIDE	1.1	U	1.1 UGL
		AIB030ABI	AB	O-XYLENE	1.1	U	1.1 UGL
		AIB030ABI	AB	CARBON TETRACHLORIDE	2.1	U	2.1 UGL
		AIB030ABI	AB	TRICHLOROFLUOROMETHANE	0.8	U	0.8 UGL
		AIB030ABI	AB	1-CHLOROHEXANE	0.5	R,U	0.5 UGL
		AIB030ABI	AB	1,2,3-TRICHLOROBENZENE	0.3	U	0.3 UGL
		AIB030ABI	AB	1,2,3-TRICHLOROPROpane	3.2	U	3.2 UGL
		AIB030ABI	AB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4 UGL
		AIB030ABI	AB	1,2,4-TRIMETHYLBENZENE	1.3	U	1.3 UGL

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9804214	SW8260A	AIB030AB1	AB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6	UG/L
		AIB030AB1	AB	1,2-DICHLOROBENZENE	0.3	U	0.3	UG/L
		AIB030AB1	AB	1,2-DICHLOROPROPANE	0.4	U	0.4	UG/L
		AIB030AB1	AB	1,3,5-TRIMETHYLBENZENE	0.5	U	0.5	UG/L
		AIB030AB1	AB	1,3-DICHLOROBENZENE	1.2	U	1.2	UG/L
		AIB030AB1	AB	1,1-DICHLOROPROPENE	1	U	1	UG/L
		AIB030AB1	AB	1,4-DICHLOROBENZENE	0.3	U	0.3	UG/L
		AIB030AB1	AB	1,2-DIBROMOETHANE	0.6	U	0.6	UG/L
		AIB030AB1	AB	2,2-DICHLOROPROPANE	3.5	U	3.5	UG/L
		AIB030AB1	AB	2-CHLOROTOLUENE	0.4	U	0.4	UG/L
		AIB030AB1	AB	4-CHLOROTOLUENE	0.6	U	0.6	UG/L
		AIB030AB1	AB	BENZENE	0.4	U	0.4	UG/L
		AIB030AB1	AB	BROMOBENZENE	0.3	U	0.3	UG/L
		AIB030AB1	AB	BROMOCHLOROMETHANE	0.4	R,U	0.4	UG/L
		AIB030AB1	AB	BROMODICHLOROMETHANE	0.8	U	0.8	UG/L
		AIB030AB1	AB	CHLOROETHANE	1	U	1	UG/L
		AIB030AB1	AB	NAPHTHALENE	0.4	U	0.4	UG/L
		AIB030AB1	AB	1,3-DICHLOROPROPANE	0.4	U	0.4	UG/L
		AIB030AB1	AB	HEXACHLOROBUTADIENE	1.1	U	1.1	UG/L
		AIB030AB1	AB	N-PROPYLBENZENE	0.4	U	0.4	UG/L
		AIB030AB1	AB	N-BUTYLBENZENE	1.1	U	1.1	UG/L
		AIB030AB1	AB	METHYLENE CHLORIDE	0.3	R	0.3	UG/L
		AIB030AB1	AB	1,2-DICHLOROETHANE	0.6	U	0.6	UG/L
		AIB030AB1	AB	ISOPROPYL BENZENE	0.5	U	0.5	UG/L
		AIB030AB1	AB	1,1-DICHLOROETHENE	1.2	U	1.2	UG/L
		AIB030AB1	AB	ETHYL BENZENE	0.6	U	0.6	UG/L
		AIB030AB1	AB	DICHLORODIFLUOROMETHANE	1	R,U	1	UG/L
		AIB030AB1	AB	DBROMOMETHANE	2.4	U	2.4	UG/L
		AIB030AB1	AB	DBROMOCHLOROMETHANE	0.5	U	0.5	UG/L
		AIB030AB1	AB	CIS-1,3-DICHLOROPROPENE	1	U	1	UG/L
		AIB030AB1	AB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2	UG/L
		AIB030AB1	AB	BROMOFORM	1.2	U	1.2	UG/L
		AIB030AB1	AB	1,1-DICHLOROETHANE	0.4	U	0.4	UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL Units
9804214	SW8260A	AIB030AB1	AB	m,p-xylene	1.3	U	1.3 UGL
		AIB030AB1	AB	CHLOROMETHANE	1.3	U	1.3 UGL
		AIB030AB1	AB	1,1,2-TRICHLOROETHANE	1	U	1 UGL
		AIB030AB1	AB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4 UGL
		AIB030AB1	AB	BROMOMETHANE	1	U	1.1 UGL
		AIB030AB1	AB	1,1,1-TRICHLOROETHANE	0.8	U	0.8 UGL
		AIB030AB1	AB	CHLOROBENZENE	0.4	U	0.4 UGL
		AIB030AB1	AB	1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5 UGL
		AIB030AB1	AB	CHLOROFORM	0.3	U	0.3 UGL
		AIB031EB1	EB	TRICHLOROETHENE	1	U	1 UGL
		AIB031EB1	EB	N-BUTYLBENZENE	1.1	U	1.1 UGL
		AIB031EB1	EB	NAPHTHALENE	0.4	U	0.4 UGL
		AIB031EB1	EB	METHYLENE CHLORIDE	0.3	R	0.3 UGL
		AIB031EB1	EB	O-XYLENE	1.1	U	1.1 UGL
		AIB031EB1	EB	SEC-BUTYLBENZENE	1.3	U	1.3 UGL
		AIB031EB1	EB	N-PROPYLBENZENE	0.4	U	0.4 UGL
		AIB031EB1	EB	TERT-BUTYLBENZENE	1.4	U	1.4 UGL
		AIB031EB1	EB	TETRACHLOROETHENE	1.4	U	1.4 UGL
		AIB031EB1	EB	TOLUENE	1.1	U	1.1 UGL
		AIB031EB1	EB	TRANS-1,3-DICHLOROPROPENE	1	U	1 UGL
		AIB031EB1	EB	TRICHLOROFLUOROMETHANE	0.8	U	0.8 UGL
		AIB031EB1	EB	VINYL CHLORIDE	1	U	1.1 UGL
		AIB031EB1	EB	P-ISOPROPYL TOLUENE	1.2	U	1.2 UGL
		AIB031EB1	EB	m,p-xylene	1.3	U	1.3 UGL
		AIB031EB1	EB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6 UGL
		AIB031EB1	EB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6 UGL
		AIB031EB1	EB	4-CHLOROTOLUENE	0.6	U	0.6 UGL
		AIB031EB1	EB	2-CHLOROTOLUENE	0.4	U	0.4 UGL
		AIB031EB1	EB	2,2-DICHLOROPROpane	3.5	U	3.5 UGL
		AIB031EB1	EB	1-CHLOROHEXANE	0.5	R,U	0.5 UGL
		AIB031EB1	EB	1,4-DICHLOROBENZENE	0.3	U	0.3 UGL
		AIB031EB1	EB	ISOPROPYL BENZENE	0.5	U	0.5 UGL
		AIB031EB1	EB	1,3-DICHLOROBENZENE	1.2	U	1.2 UGL

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9804214	SW8260A	AIB031EB1	EB	STYRENE	0.4	U	0.4	UG/L
	AIB031EB1	EB		1,3,5-TRIMETHYLBENZENE	0.5	U	0.5	UG/L
	AIB031EB1	EB		1,2-DICHLOROPROPANE	0.4	U	0.4	UG/L
	AIB031EB1	EB		1,2-DICHLOROETHANE	0.6	U	0.6	UG/L
	AIB031EB1	EB		BENZENE	0.4	U	0.4	UG/L
	AIB031EB1	EB		1,2-DIBROMOETHANE	0.6	U	0.6	UG/L
	AIB031EB1	EB		1,3-DICHLOROPROPANE	0.4	U	0.4	UG/L
	AIB031EB1	EB		1,2,4-TRIMETHYLBENZENE	1.3	U	1.3	UG/L
	AIB031EB1	EB		1,2,4-TRICHLOROBENZENE	0.4	U	0.4	UG/L
	AIB031EB1	EB		1,2,3-TRICHLOROPROPANE	3.2	U	3.2	UG/L
	AIB031EB1	EB		1,2,3-TRICHLOROBENZENE	0.3	U	0.3	UG/L
	AIB031EB1	EB		1,1-DICHLOROPROPENE	1	U	1	UG/L
	AIB031EB1	EB		1,1-DICHLOROETHENE	1.2	U	1.2	UG/L
	AIB031EB1	EB		1,1-DICHLOROETHANE	0.4	U	0.4	UG/L
	AIB031EB1	EB		1,1,2-TRICHLOROETHANE	1	U	1	UG/L
	AIB031EB1	EB		1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4	UG/L
	AIB031EB1	EB		1,1,1-TRICHLOROETHANE	0.8	U	0.8	UG/L
	AIB031EB1	EB		1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5	UG/L
	AIB031EB1	EB		1,2-DICHLOROBENZENE	0.3	U	0.3	UG/L
	AIB031EB1	EB		CHLOROMETHANE	1.3	U	1.3	UG/L
	AIB031EB1	EB		BROMOFORM	1.2	U	1.2	UG/L
	AIB031EB1	EB		BROMODICHLOROMETHANE	0.8	U	0.8	UG/L
	AIB031EB1	EB		CHLOROBENZENE	0.4	U	0.4	UG/L
	AIB031EB1	EB		BROMOCHLOROMETHANE	0.4	R,U	0.4	UG/L
	AIB031EB1	EB		CHLOROETHANE	1	U	1	UG/L
	AIB031EB1	EB		BROMOMETHANE	1.1	U	1.1	UG/L
	AIB031EB1	EB		CHLOROFORM	0.3	U	0.3	UG/L
	AIB031EB1	EB		CARBON TETRACHLORIDE	2.1	U	2.1	UG/L
	AIB031EB1	EB		CIS-1,2-DICHLOROETHENE	1.2	U	1.2	UG/L
	AIB031EB1	EB		CIS-1,3-DICHLOROPROPENE	1	U	1	UG/L
	AIB031EB1	EB		DIBROMOCHLOROMETHANE	0.5	U	0.5	UG/L
	AIB031EB1	EB		DIBROMOMETHANE	2.4	U	2.4	UG/L
	AIB031EB1	EB		DICHLORODIFLUOROMETHANE	1	R,U	1	UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9804214	SW8260A	AIB031EB1	EB	ETHYLBENZENE	0.6	U	0.6	UG/L
		AIB031EB1	EB	HEXACHLOROBUTADIENE	1.1	U	1.1	UG/L
		AIB031EB1	EB	BROMOBENZENE	0.3	U	0.3	UG/L
	LABQC	LB		CHLOROETHANE	1	U	1	UG/L
	LABQC	LB		2-CHLORTOLUENE	0.4	U	0.4	UG/L
	LABQC	LB		ISOPROPYLBENZENE	0.5	U	0.5	UG/L
	LABQC	LB		N-PROPYLBENZENE	0.4	U	0.4	UG/L
	LABQC	LB		TRANS-1,3-DICHLOROPROPENE	1	U	1	UG/L
	LABQC	LB		HEXACHLOROBUTADIENE	1.1	U	1.1	UG/L
	LABQC	LB		BROMODICHLOROMETHANE	0.8	U	0.8	UG/L
	LABQC	LB		CIS-1,3-DICHLOROPROPENE	1	U	1	UG/L
	LABQC	LB		TETRACHLOROETHENE	1.4	U	1.4	UG/L
	LABQC	LB		P-ISOPROPYL-TOLUENE	1.2	U	1.2	UG/L
	LABQC	LB		TRICHLOROFLUOROMETHANE	0.8	U	0.8	UG/L
	LABQC	LB		N-BUTYLBENZENE	1.1	U	1.1	UG/L
	LABQC	LB		1-CHLOROHEXANE	0.5	R,U	0.5	UG/L
	LABQC	LB		CHLOROBENZENE	0.4	U	0.4	UG/L
	LABQC	LB		TOLUENE	1.1	U	1.1	UG/L
	LABQC	LB		CIS-1,2-DICHLOROETHENE	1.2	U	1.2	UG/L
	LABQC	LB		DICHLORODIFLUOROMETHANE	1	R,U	1	UG/L
	LABQC	LB		CARBON TETRACHLORIDE	2.1	U	2.1	UG/L
	LABQC	LB		BROMOCHLOROMETHANE	0.4	R,U	0.4	UG/L
	LABQC	LB		TRANS-1,2-DICHLOROETHENE	0.6	U	0.6	UG/L
	LABQC	LB		NAPHTHALENE	0.4	U	0.4	UG/L
	LABQC	LB		2,2-DICHLOROPROPANE	3.5	U	3.5	UG/L
	LABQC	LB		STYRENE	0.4	U	0.4	UG/L
	LABQC	LB		CHLOROFORM	0.3	U	0.3	UG/L
	LABQC	LB		ETHYLBENZENE	0.6	U	0.6	UG/L
	LABQC	LB		TERT-BUTYLBENZENE	1.4	U	1.4	UG/L
	LABQC	LB		BROMOBENZENE	0.3	U	0.3	UG/L
	LABQC	LB		CHLOROMETHANE	1.3	R,U	1.3	UG/L
	LABQC	LB		DIBROMOMETHANE	2.4	U	2.4	UG/L
	LABQC	LB		BROMOMETHANE	1.1	R,U	1.1	UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9804214	SW8260A	LABQC	LB	DBROMOCHLOROMETHANE	0.5	U	0.5	UG/L
		LABQC	LB	4-CHLOROTOLUENE	0.6	U	0.6	UG/L
		LABQC	LB	1,4-DICHLOROBENZENE	0.3	U	0.3	UG/L
		LABQC	LB	VINYL CHLORIDE	1.1	U	1.1	UG/L
		LABQC	LB	BROMOFORM	1.2	U	1.2	UG/L
		LABQC	LB	METHYLENE CHLORIDE	1.7	R	0.3	UG/L
		LABQC	LB	BENZENE	0.4	U	0.4	UG/L
		LABQC	LB	SEC-BUTYL BENZENE	1.3	U	1.3	UG/L
		LABQC	LB	OXYLENE	1.1	U	1.1	UG/L
		LABQC	LB	TRICHLOROETHENE	1	U	1	UG/L
		LABQC	LB	m,p-xylene	1.3	U	1.3	UG/L
		LABQC	LB	1,1,1-TRICHLOROETHANE	0.8	U	0.8	UG/L
		LABQC	LB	1,1,2-TETRACHLOROETHANE	0.5	U	0.5	UG/L
		LABQC	LB	1,1,2-TRICHLOROETHANE	1	U	1	UG/L
		LABQC	LB	1,1-DICHLOROETHANE	0.4	U	0.4	UG/L
		LABQC	LB	1,2-DIBROMOETHANE	0.6	U	0.6	UG/L
		LABQC	LB	1,1-DICHLOROPROPENE	1	U	1	UG/L
		LABQC	LB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4	UG/L
		LABQC	LB	1,2-DICHLOROETHANE	0.6	U	0.6	UG/L
		LABQC	LB	1,2,3-TRICHLOROBENZENE	0.3	U	0.3	UG/L
		LABQC	LB	1,2,3-TRICHLOROPROPANE	3.2	U	3.2	UG/L
		LABQC	LB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4	UG/L
		LABQC	LB	1,2,4-TRIMETHYLBENZENE	1.3	U	1.3	UG/L
		LABQC	LB	1,3,5-TRIMETHYLBENZENE	0.5	R,U	0.5	UG/L
		LABQC	LB	1,2-DIBROMO-3-CHLOROPROpane	2.6	U	2.6	UG/L
		LABQC	LB	1,3-DICHLOROPROPANE	0.4	U	0.4	UG/L
		LABQC	LB	1,2-DICHLOROPROPANE	0.4	U	0.4	UG/L
		LABQC	LB	1,1-DICHLOROETHENE	1.2	U	1.2	UG/L
		LABQC	LB	1,2-DICHLOROBENZENE	0.3	U	0.3	UG/L
		LABQC	LB	1,3-DICHLOROBENZENE	1.2	U	1.2	UG/L
		LABQC	LB	ORTHO PHOSPHATE	0.1	U	0.1	MGL
		AIB03IEB1	EB	NITRITE	0.4	U	0.4	MGL
		AIB03IEB1	EB	NITRATE	0.1	U	0.1	MGL

SDG	Method	Field ID	OCType	Analyte	Result	LabFlag	RL Units
9804214	SW9056	AIB031EB1	EB	FLUORIDE	0.2	U	0.2 MG/L
		AIB031EB1	EB	CHLORIDE	0.2	U	0.2 MG/L
		AIB031EB1	EB	BROMIDE	0.1	U	0.1 MG/L
		AIB031EB1	EB	SULFATE	0.2	U	0.2 MG/L
		LABQC	LB	BROMIDE	0.1	U	0.1 MG/L
		LABQC	LB	NITRATE	0.1	U	0.1 MG/L
		LABQC	LB	FLUORIDE	0.2	U	0.2 MG/L
		LABQC	LB	NITRITE	0.4	U	0.4 MG/L
		LABQC	LB	SULFATE	0.2	U	0.2 MG/L
		LABQC	LB	ORTHOPHOSPHATE	0.1	U	0.1 MG/L
		LABQC	LB	CHLORIDE	0.2	U	0.2 MG/L
		SW9060	AIB031EB1	TOTAL ORGANIC CARBON	1	ND	1 MG/L
		LABQC	LB	TOTAL ORGANIC CARBON	1	ND	1 MG/L
9804220	SW8260A	AIB038TB1	TB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2 UGL
		AIB038TB1	TB	TOLUENE	1.1	U	1.1 UGL
		AIB038TB1	TB	VINYL CHLORIDE	1.1	U	1.1 UGL
		AIB038TB1	TB	TRICHLOROFLUOROMETHANE	0.8	U	0.8 UGL
		AIB038TB1	TB	TRICHLOROETHENE	1	U	1 UGL
		AIB038TB1	TB	TRANS-1,3-DICHLOROPROPENE	1	U	1 UGL
		AIB038TB1	TB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6 UGL
		AIB038TB1	TB	CHLOROETHANE	1	U	1 UGL
		AIB038TB1	TB	ISOPROPYL BENZENE	0.5	U	0.5 UGL
		AIB038TB1	TB	2,2-DICHLOROPROpane	3.5	U	3.5 UGL
		AIB038TB1	TB	2-CHLOROTOLUENE	0.4	U	0.4 UGL
		AIB038TB1	TB	4-CHLOROTOLUENE	0.6	U	0.6 UGL
		AIB038TB1	TB	BENZENE	0.4	U	0.4 UGL
		AIB038TB1	TB	BROMOBENZENE	0.3	U	0.3 UGL
		AIB038TB1	TB	BROMOCHLOROMETHANE	0.4	R,U	0.4 UGL
		AIB038TB1	TB	BROMODICHLOROMETHANE	0.8	U	0.8 UGL
		AIB038TB1	TB	BROMOFORM	1.2	U	1.2 UGL
		AIB038TB1	TB	BROMOMETHANE	1.1	R,U	1.1 UGL
		AIB038TB1	TB	1,4-DICHLOROBENZENE	0.3	U	0.3 UGL
		AIB038TB1	TB	CHLOROBENZENE	0.4	U	0.4 UGL

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9804220	SW8260A	AIB038TBI	TB	1-CHLOROHEXANE	0.5	R,U	0.5	UG/L
		AIB038TBI	TB	CHLOROFORM	0.3	U	0.3	UG/L
		AIB038TBI	TB	CHLORMETHANE	1.3	R,U	1.3	UG/L
		AIB038TBI	TB	CIS-1,3-DICHLOROPROPENE	1	U	1	UG/L
		AIB038TBI	TB	DIBROMOMETHANE	2.4	U	2.4	UG/L
		AIB038TBI	TB	DICHLORODIFLUOROMETHANE	1	R,U	1	UG/L
		AIB038TBI	TB	ETHYLBENZENE	0.6	U	0.6	UG/L
		AIB038TBI	TB	N-PROPYLBENZENE	0.4	U	0.4	UG/L
		AIB038TBI	TB	N-BUTYLBENZENE	1.1	U	1.1	UG/L
		AIB038TBI	TB	METHYLENE CHLORIDE	1.4	R	0.3	UG/L
		AIB038TBI	TB	m,p-Xylene	1.3	U	1.3	UG/L
		AIB038TBI	TB	1,1,2-TRICHLOROETHANE	1	U	1	UG/L
		AIB038TBI	TB	CARBON TETRACHLORIDE	2.1	U	2.1	UG/L
		AIB038TBI	TB	1,1-DICHLOROPROPENE	1	U	1	UG/L
		AIB038TBI	TB	TERT-BUTYLBENZENE	1.4	U	1.4	UG/L
		AIB038TBI	TB	STYRENE	0.4	U	0.4	UG/L
		AIB038TBI	TB	SEC-BUTYLBENZENE	1.3	U	1.3	UG/L
		AIB038TBI	TB	P-ISOPROPYL-TOLUENE	1.2	U	1.2	UG/L
		AIB038TBI	TB	O-XYLENE	1.1	U	1.1	UG/L
		AIB038TBI	TB	NAPHTHALENE	0.4	U	0.4	UG/L
		AIB038TBI	TB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4	UG/L
		AIB038TBI	TB	1,1,1-TRICHLOROETHANE	0.8	U	0.8	UG/L
		AIB038TBI	TB	1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5	UG/L
		AIB038TBI	TB	HEXACHLOROBUTADIENE	1.1	U	1.1	UG/L
		AIB038TBI	TB	1,1-DICHLOROETHENE	1.2	U	1.2	UG/L
		AIB038TBI	TB	1,3-DICHLOROPROpane	0.4	U	0.4	UG/L
		AIB038TBI	TB	1,2,3-TRICHLOROBENZENE	0.3	U	0.3	UG/L
		AIB038TBI	TB	1,2-DICHLOROETHANE	0.6	U	0.6	UG/L
		AIB038TBI	TB	1,3-DICHLOROBENZENE	1.2	U	1.2	UG/L
		AIB038TBI	TB	1,3,5-TRIMETHYLBENZENE	0.5	R,U	0.5	UG/L
		AIB038TBI	TB	1,1-DICHLOROETHANE	0.4	U	0.4	UG/L
		AIB038TBI	TB	1,2-DICHLOROPROpane	0.4	U	0.4	UG/L
		AIB038TBI	TB	TETRACHLOROETHENE	1.4	U	1.4	UG/L

SDG	Method Field ID	QCType	Analyte	Result	LabFlag	RL Units
9804220	SW8260A	AIB038TB1	TB	1,2-DICHLOROBENZENE	0.3	U
		AIB038TB1	TB	1,2-DIBROMOETHANE	0.6	U
		AIB038TB1	TB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U
		AIB038TB1	TB	1,2,4-TRIMETHYLBENZENE	1.3	U
		AIB038TB1	TB	1,2,4-TRICHLOROBENZENE	0.4	U
		AIB038TB1	TB	DIBROMOCHLOROMETHANE	0.5	U
		AIB038TB1	TB	1,2,3-TRICHLOROPROPANE	3.2	U
		AIB039EB1	EB	TRICHLOROFLUOROMETHANE	0.8	U
		AIB039EB1	EB	TRICHLOROETHENE	1	U
		AIB039EB1	EB	TRANS-1,3-DICHLOROPROPENE	1	U
		AIB039EB1	EB	TRANS-1,2-DICHLOROETHENE	0.6	U
		AIB039EB1	EB	TOLUENE	1.1	U
		AIB039EB1	EB	TETRACHLOROETHENE	1.4	U
		AIB039EB1	EB	1,2-DICHLOROBENZENE	0.3	U
		AIB039EB1	EB	BROMODICHLOROMETHANE	0.8	U
		AIB039EB1	EB	BROMOCHLOROMETHANE	0.4	R,U
		AIB039EB1	EB	TERT-BUTYLBENZENE	1.4	U
		AIB039EB1	EB	BENZENE	0.4	U
		AIB039EB1	EB	VINYL CHLORIDE	1	U
		AIB039EB1	EB	2-CHLOROTOLUENE	0.4	U
		AIB039EB1	EB	2,2-DICHLOROPROPANE	3.5	U
		AIB039EB1	EB	1-CHLOROHEXANE	0.5	R,U
		AIB039EB1	EB	1,4-DICHLOROBENZENE	0.3	U
		AIB039EB1	EB	1,3-DICHLOROPROPANE	0.4	U
		AIB039EB1	EB	1,3-DICHLOROBENZENE	1.2	U
		AIB039EB1	EB	1,3,5-TRIMETHYLBENZENE	0.5	R,U
		AIB039EB1	EB	BROMOFORM	1.2	U
		AIB039EB1	EB	1,2-DICHLOROETHANE	0.6	U
		AIB039EB1	EB	BROMOBENZENE	0.3	U
		AIB039EB1	EB	1,2-DIBROMOETHANE	0.6	U
		AIB039EB1	EB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U
		AIB039EB1	EB	1,2,4-TRIMETHYLBENZENE	1.3	U
		AIB039EB1	EB	1,2,4-TRICHLOROBENZENE	0.4	U

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9804220	SW8260A	AIB039EB1	EB	1,2,3-TRICHLOROPROpane	3.2	U	3.2	UG/L
	AIB039EB1	EB		1,2,3-TRICHLOROBENZENE	0.3	U	0.3	UG/L
	AIB039EB1	EB		1,1-DICHLOROPROPENE	1	U	1	UG/L
	AIB039EB1	EB		1,1-DICHLOROETHENE	1.2	U	1.2	UG/L
	AIB039EB1	EB		1,1-DICHLOROETHANE	0.4	U	0.4	UG/L
	AIB039EB1	EB		1,1,2-TRICHLOROETHANE	1	U	1	UG/L
	AIB039EB1	EB		1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4	UG/L
	AIB039EB1	EB		1,1,1-TRICHLOROETHANE	0.8	U	0.8	UG/L
	AIB039EB1	EB		1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5	UG/L
	AIB039EB1	EB		1,2-DICHLOROPROPANE	0.4	U	0.4	UG/L
	AIB039EB1	EB		CIS-1,2-DICHLOROETHENE	1.2	U	1.2	UG/L
	AIB039EB1	EB		HEXACHLOROBUTADIENE	1.1	U	1.1	UG/L
	AIB039EB1	EB		m,p-xylene	1.3	U	1.3	UG/L
	AIB039EB1	EB		ETHYL BENZENE	0.6	U	0.6	UG/L
	AIB039EB1	EB		4-CHLOROTOLUENE	0.6	U	0.6	UG/L
	AIB039EB1	EB		METHYLENE CHLORIDE	0.3	R,U	0.3	UG/L
	AIB039EB1	EB		BROMOMETHANE	1.1	R,U	1.1	UG/L
	AIB039EB1	EB		DIBROMOMETHANE	2.4	U	2.4	UG/L
	AIB039EB1	EB		N-BUTYL BENZENE	1.1	U	1.1	UG/L
	AIB039EB1	EB		N-PROPYLBENZENE	0.4	U	0.4	UG/L
	AIB039EB1	EB		DIBROMOCHLOROMETHANE	0.5	U	0.5	UG/L
	AIB039EB1	EB		CIS-1,3-DICHLOROPROPENE	1	U	1	UG/L
	AIB039EB1	EB		ISOPROPYL BENZENE	0.5	U	0.5	UG/L
	AIB039EB1	EB		NAPHTHALENE	0.4	U	0.4	UG/L
	AIB039EB1	EB		DICHLORODIFLUOROMETHANE	1	R,U	1	UG/L
	AIB039EB1	EB		O-XYLENE	1.1	U	1.1	UG/L
	AIB039EB1	EB		CHLOROMETHANE	1.3	R,U	1.3	UG/L
	AIB039EB1	EB		CHLOROFORM	0.3	U	0.3	UG/L
	AIB039EB1	EB		CHLOROETHANE	1	U	1	UG/L
	AIB039EB1	EB		P-ISOPROPYL TOLUENE	1.2	U	1.2	UG/L
	AIB039EB1	EB		SEC-BUTYL BENZENE	1.3	U	1.3	UG/L
	AIB039EB1	EB		CHLOROBENZENE	0.4	U	0.4	UG/L
	AIB039EB1	EB		CARBON TETRACHLORIDE	2.1	U	2.1	UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9804220	SW8260A	AB039EB1	EB	STYRENE	0.4	U	0.4	UG/L
	LABQC	LB		TRICHLOROETHENE	1	U	1	UG/L
	LABQC	LB		CHLOROFORM	0.3	U	0.3	UG/L
	LABQC	LB		BENZENE	0.4	U	0.4	UG/L
	LABQC	LB		2,2-DICHLOROPROPANE	3.5	U	3.5	UG/L
	LABQC	LB		O-XYLENE	1.1	U	1.1	UG/L
	LABQC	LB		NAPHTHALENE	0.4	U	0.4	UG/L
	LABQC	LB		DIBROMOCHLOROMETHANE	0.5	U	0.5	UG/L
	LABQC	LB		N-BUTYLBENZENE	1.1	U	1.1	UG/L
	LABQC	LB		CHLOROETHANE	1	U	1	UG/L
	LABQC	LB		1-CHLOROHEXANE	0.5	R,U	0.5	UG/L
	LABQC	LB		BROMOMETHANE	1.1	R,U	1.1	UG/L
	LABQC	LB		METHYLENE CHLORIDE	2	R	0.3	UG/L
	LABQC	LB		CIS-1,2-DICHLOROETHENE	1.2	U	1.2	UG/L
	LABQC	LB		BROMODICHLOROMETHANE	0.8	U	0.8	UG/L
	LABQC	LB		CHLOROMETHANE	1.3	R,U	1.3	UG/L
	LABQC	LB		HEXA CHLOROBUTADIENE	1.1	U	1.1	UG/L
	LABQC	LB		P-ISOPROPYL TOLUENE	1.2	U	1.2	UG/L
	LABQC	LB		ETHYL BENZENE	0.6	U	0.6	UG/L
	LABQC	LB		TETRACHLOROETHENE	1.4	U	1.4	UG/L
	LABQC	LB		SEC-BUTYL BENZENE	1.3	U	1.3	UG/L
	LABQC	LB		BROMOFORM	1.2	U	1.2	UG/L
	LABQC	LB		m,p-xylene	1.3	U	1.3	UG/L
	LABQC	LB		2-CHLOROTOLUENE	0.4	U	0.4	UG/L
	LABQC	LB		CIS-1,3-DICHLOROPROPENE	1	U	1	UG/L
	LABQC	LB		ISOPROPYL BENZENE	0.5	U	0.5	UG/L
	LABQC	LB		DI BROMOMETHANE	2.4	U	2.4	UG/L
	LABQC	LB		BROMOBENZENE	0.3	U	0.3	UG/L
	LABQC	LB		CHLOROBENZENE	0.4	U	0.4	UG/L
	LABQC	LB		N-PROPYL BENZENE	0.4	U	0.4	UG/L
	LABQC	LB		STYRENE	0.4	U	0.4	UG/L
	LABQC	LB		TRANS-1,3-DICHLOROPROPENE	1	U	1	UG/L
	LABQC	LB		TRANS-1,2-DICHLOROETHENE	0.6	U	0.6	UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9804220	SW8260A	LABQC	LB	TERT-BUTYL BENZENE	1.4	U	1.4	UG/L
		LABQC	LB	VINYL-CHLORIDE	1.1	U	1.1	UG/L
		LABQC	LB	TRICHLOROFLUOROMETHANE	0.8	U	0.8	UG/L
		LABQC	LB	BROMOCHLOROMETHANE	0.4	R,U	0.4	UG/L
		LABQC	LB	TOLUENE	1.1	U	1.1	UG/L
		LABQC	LB	CARBON TETRACHLORIDE	2.1	U	2.1	UG/L
		LABQC	LB	4-CHLORTOLUENE	0.6	U	0.6	UG/L
		LABQC	LB	DICHLORODIFLUOROMETHANE	1	R,U	1	UG/L
		LABQC	LB	1,4-DICHLOROBENZENE	0.3	U	0.3	UG/L
		LABQC	LB	1,3,5-TRIMETHYLBENZENE	0.5	U	0.5	UG/L
		LABQC	LB	1,3-DICHLOROPROPANE	0.4	U	0.4	UG/L
		LABQC	LB	1,3-DICHLOROBENZENE	1.2	U	1.2	UG/L
		LABQC	LB	1,2-DICHLOROPROPANE	0.4	U	0.4	UG/L
		LABQC	LB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4	UG/L
		LABQC	LB	1,1-DICHLOROETHENE	1.2	U	1.2	UG/L
		LABQC	LB	1,1-DICHLOROPROPENE	1	U	1	UG/L
		LABQC	LB	1,2,3-TRICHLOROBENZENE	0.3	U	0.3	UG/L
		LABQC	LB	1,1-DICHLOROETHANE	0.4	U	0.4	UG/L
		LABQC	LB	1,2,3-TRICHLOROPROPANE	3.2	U	3.2	UG/L
		LABQC	LB	1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5	UG/L
		LABQC	LB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4	UG/L
		LABQC	LB	1,2-DICHLOROETHANE	0.6	U	0.6	UG/L
		LABQC	LB	1,2,4-TRIMETHYLBENZENE	1.3	U	1.3	UG/L
		LABQC	LB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6	UG/L
		LABQC	LB	1,1,1-TRICHLOROETHANE	0.8	U	0.8	UG/L
		LABQC	LB	1,2-DIBROMOETHANE	0.6	U	0.6	UG/L
		LABQC	LB	1,2-DICHLOROBENZENE	0.3	U	0.3	UG/L
		LABQC	LB	1,1,2-TRICHLOROETHANE	1	U	1	UG/L
9804237	SW8260A	AIB052TB1	TB	BROMOFORM	1.2	U	1.2	UG/L
		AIB052TB1	TB	1,2-DICHLOROBENZENE	0.3	U	0.3	UG/L
		AIB052TB1	TB	CARBON TETRACHLORIDE	2.1	R,U	2.1	UG/L
		AIB052TB1	TB	BROMOCHLOROMETHANE	0.4	R,U	0.4	UG/L
		AIB052TB1	TB	BROMOBENZENE	0.3	U	0.3	UG/L

SDG	Method Field ID	QCType	Analyte	Result	LabFlag	RL Units
9804237	SW8260A	AIB052TB1	TB	BENZENE	U	0.4 UG/L
	AIB052TB1	TB	4-CHLOROTOLUENE	0.4	U	0.6 UG/L
	AIB052TB1	TB	2-CHLOROTOLUENE	0.6	U	0.6 UG/L
	AIB052TB1	TB	2,2-DICHLOROPROPANE	0.4	U	0.4 UG/L
	AIB052TB1	TB	1-CHLOROHEXANE	3.5	R,U	3.5 UG/L
	AIB052TB1	TB	1,4-DICHLOROBENZENE	0.5	R,U	0.5 UG/L
	AIB052TB1	TB	1,3-DICHLOROPROPANE	0.3	R,U	0.3 UG/L
	AIB052TB1	TB	1,3-DICHLOROBENZENE	0.4	U	0.4 UG/L
	AIB052TB1	TB	1,3,5-TRIMETHYLBENZENE	1.2	U	1.2 UG/L
	AIB052TB1	TB	BROMODICHLOROMETHANE	0.5	R,U	0.5 UG/L
	AIB052TB1	TB	1,2-DICHLOROETHANE	0.8	U	0.8 UG/L
	AIB052TB1	TB	BROMOMETHANE	0.6	U	0.6 UG/L
	AIB052TB1	TB	1,2-DIBROMOETHANE	1.1	R,U	1.1 UG/L
	AIB052TB1	TB	1,2-DIBROMO-3-CHLOROPROPANE	0.6	U	0.6 UG/L
	AIB052TB1	TB	1,2,4-TRIMETHYLBENZENE	2.6	U	2.6 UG/L
	AIB052TB1	TB	1,2,4-TRICHLOROBENZENE	1.3	R,U	1.3 UG/L
	AIB052TB1	TB	1,2,3-TRICHLOROPROPANE	0.4	U	0.4 UG/L
	AIB052TB1	TB	1,2,3-TRICHLOROBENZENE	3.2	U	3.2 UG/L
	AIB052TB1	TB	1,1-DICHLOROPROPENE	0.3	U	0.3 UG/L
	AIB052TB1	TB	1,1,2,3-TRICHLOROPROPANE	1	R,U	1 UG/L
	AIB052TB1	TB	1,1,2,3-TRICHLOROBENZENE	1.2	R,U	1.2 UG/L
	AIB052TB1	TB	1,1-DICHLOROETHANE	0.4	R,U	0.4 UG/L
	AIB052TB1	TB	1,1,2-TRICHLOROETHANE	1	U	1 UG/L
	AIB052TB1	TB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4 UG/L
	AIB052TB1	TB	1,1,1-TRICHLOROETHANE	0.8	R,U	0.8 UG/L
	AIB052TB1	TB	1,1,1,2-TETRACHLOROETHANE	0.5	R,U	0.5 UG/L
	AIB052TB1	TB	1,2-DICHLOROPROPANE	0.4	U	0.4 UG/L
	AIB052TB1	TB	METHYLENE CHLORIDE	0.3	R,U	0.3 UG/L
	AIB052TB1	TB	TRICHLOROFLUOROMETHANE	0.8	R,U	0.8 UG/L
	AIB052TB1	TB	TRICHLOROETHENE	1	U	1 UG/L
	AIB052TB1	TB	TRANS-1,3-DICHLOROPROPENE	1	U	1 UG/L
	AIB052TB1	TB	TRANS-1,2-DICHLOROETHENE	0.6	R,U	0.6 UG/L
	AIB052TB1	TB	TOLUENE	1.1	U	1.1 UG/L
	AIB052TB1	TB	TETRACHLOROETHENE	1.4	R,U	1.4 UG/L

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9804237	SW8260A	AIB052TB1	TB	TERT-BUTYLBENZENE	1.4	R,U	1.4	UG/L
	AIB052TB1	TB		STYRENE	0.4	U	0.4	UG/L
	AIB052TB1	TB		SEC-BUTYLBENZENE	1.3	R,U	1.3	UG/L
	AIB052TB1	TB		P-ISOPROPYLtoluene	1.2	U	1.2	UG/L
	AIB052TB1	TB		OXYLENE	1.1	R,U	1.1	UG/L
	AIB052TB1	TB		NAPHTHALENE	0.4	U	0.4	UG/L
	AIB052TB1	TB		N-BUTYLBENZENE	1.1	U	1.1	UG/L
	AIB052TB1	TB		DI(BROMOMETHANE)	2.4	U	2.4	UG/L
	AIB052TB1	TB		CHLOROBENZENE	0.4	U	0.4	UG/L
	AIB052TB1	TB		CHLOROETHANE	1	R,U	1	UG/L
	AIB052TB1	TB		CHLOROFORM	0.3	U	0.3	UG/L
	AIB052TB1	TB		CHLOROMETHANE	1.3	R,U	1.3	UG/L
	AIB052TB1	TB		CIS-1,2-DICHLOROETHENE	1.2	U	1.2	UG/L
	AIB052TB1	TB		N-PROPYLBENZENE	0.4	R,U	0.4	UG/L
	AIB052TB1	TB		DI(BROMOCHLOROMETHANE)	0.5	R,U	0.5	UG/L
	AIB052TB1	TB		VINYL CHLORIDE	1.1	R,U	1.1	UG/L
	AIB052TB1	TB		DICHLORODIFLUOROMETHANE	1	R,U	1	UG/L
	AIB052TB1	TB		ETHYL BENZENE	0.6	U	0.6	UG/L
	AIB052TB1	TB		HEXACHLOROBUTADIENE	1.1	R,U	1.1	UG/L
	AIB052TB1	TB		ISOPROPYLBENZENE	0.5	U	0.5	UG/L
	AIB052TB1	TB		m,p-xylene	1.3	R,U	1.3	UG/L
	AIB052TB1	TB		CIS-1,3-DICHLOROPROPENE	1	U	1	UG/L
	AIB053EB1	EB		1,2-DIBROMOETHANE	0.6	U	0.6	UG/L
	AIB053EB1	EB		BROMOMETHANE	1.1	R,U	1.1	UG/L
	AIB053EB1	EB		2,2-DICHLOROPROpane	3.5	R,U	3.5	UG/L
	AIB053EB1	EB		2-CHLOROTOLUENE	0.4	U	0.4	UG/L
	AIB053EB1	EB		4-CHLOROTOLUENE	0.6	U	0.6	UG/L
	AIB053EB1	EB		BENZENE	0.4	U	0.4	UG/L
	AIB053EB1	EB		BROMOBENZENE	0.3	U	0.3	UG/L
	AIB053EB1	EB		BROMOCHLOROMETHANE	0.4	R,U	0.4	UG/L
	AIB053EB1	EB		CIS-1,3-DICHLOROPROPENE	1	U	1	UG/L
	AIB053EB1	EB		BROMOFORM	1.2	U	1.2	UG/L
	AIB053EB1	EB		1,3-DICHLOROPROPANE	0.4	U	0.4	UG/L

SDG	Method Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9804237	SW8260A	AIB053EBI	EB	1,2-DICHLOROETHANE	0.6	U	0.6 UGL
	AIB053EBI	EB	CARBON TETRACHLORIDE	2.1	R,U	2.1	UGL
	AIB053EBI	EB	VINYL CHLORIDE	1.1	R,U	1.1	UGL
	AIB053EBI	EB	CHLOROETHANE	1	R,U	1	UGL
	AIB053EBI	EB	CHLOROFORM	0.3	U	0.3	UGL
	AIB053EBI	EB	CHLOROMETHANE	1.3	R,U	1.3	UGL
	AIB053EBI	EB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2	UGL
	AIB053EBI	EB	BROMODICHLOROMETHANE	0.8	U	0.8	UGL
	AIB053EBI	EB	1,2,4-TRICHLOROBENZENE	0.4	U	0.4	UGL
	AIB053EBI	EB	1,1,1,2-TETRACHLOROETHANE	0.5	R,U	0.5	UGL
	AIB053EBI	EB	1,1,1-TRICHLOROETHANE	0.8	R,U	0.8	UGL
	AIB053EBI	EB	1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4	UGL
	AIB053EBI	EB	1,1,2-TRICHLOROETHANE	1	U	1	UGL
	AIB053EBI	EB	1,1-DICHLOROETHANE	0.4	R,U	0.4	UGL
	AIB053EBI	EB	1,1-DICHLOROETHENE	1.2	R,U	1.2	UGL
	AIB053EBI	EB	1,1-DICHLOROPROPENE	1	R,U	1	UGL
	AIB053EBI	EB	1-CHLOROHEXANE	0.5	R,U	0.5	UGL
	AIB053EBI	EB	1,2,3-TRICHLOROPROPANE	3.2	U	3.2	UGL
	AIB053EBI	EB	1,4-DICHLOROBENZENE	0.3	R,U	0.3	UGL
	AIB053EBI	EB	1,2,4-TRIMETHYLBENZENE	1.3	R,U	1.3	UGL
	AIB053EBI	EB	1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6	UGL
	AIB053EBI	EB	1,2-DICHLOROBENZENE	0.3	U	0.3	UGL
	AIB053EBI	EB	1,2-DICHLOROPROFANE	0.4	U	0.4	UGL
	AIB053EBI	EB	1,3,5-TRIMETHYLBENZENE	0.5	R,U	0.5	UGL
	AIB053EBI	EB	1,3-DICHLOROBENZENE	1.2	U	1.2	UGL
	AIB053EBI	EB	CHLOROBENZENE	0.4	U	0.4	UGL
	AIB053EBI	EB	1,2,3-TRICHLOROBENZENE	0.3	R,U	1.3	UGL
	AIB053EBI	EB	METHYLENE CHLORIDE	0.3	R,U	0.3	UGL
	AIB053EBI	EB	STYRENE	0.4	U	0.4	UGL
	AIB053EBI	EB	SEC-BUTYL BENZENE	1.3	R,U	1.3	UGL
	AIB053EBI	EB	P-ISOPROPYL TOLUENE	1.2	U	1.2	UGL
	AIB053EBI	EB	TETRACHLOROETHENE	1.4	R,U	1.4	UGL
	AIB053EBI	EB	TOLUENE	1.1	U	1.1	UGL

SDG	Method	Field ID	QC Type	Analyte	Result	LabFlag	RL Units
9804237	SW8260A	AIB053EB1	EB	O-XYLENE	1.1	R,U	1.1 UGL
		AIB053EB1	EB	NAPHTHALENE	0.4	U	0.4 UGL
		AIB053EB1	EB	N-PROPYLBENZENE	0.4	R,U	0.4 UGL
		AIB053EB1	EB	TERT-BUTYLBENZENE	1.4	R,U	1.4 UGL
		AIB053EB1	EB	TRANS-1,2-DICHLOROETHENE	0.6	R,U	0.6 UGL
		AIB053EB1	EB	m,p-xylene	1.3	R,U	1.3 UGL
		AIB053EB1	EB	TRANS-1,3-DICHLOROPROPENE	1	U	1 UGL
		AIB053EB1	EB	ETHYLBENZENE	0.6	U	0.6 UGL
		AIB053EB1	EB	DIBROMOCHLOROMETHANE	0.5	R,U	0.5 UGL
		AIB053EB1	EB	ISOPROPYLBENZENE	0.5	U	0.5 UGL
		AIB053EB1	EB	DIBROMOMETHANE	2.4	U	2.4 UGL
		AIB053EB1	EB	HEXACHLOROBUTADIENE	1.1	R,U	1.1 UGL
		AIB053EB1	EB	DICHLORODIFLUOROMETHANE	1	R,U	1 UGL
		AIB053EB1	EB	TRICHLOROETHENE	1	U	1 UGL
		AIB053EB1	EB	TRICHLOROFLUOROMETHANE	0.8	R,U	0.8 UGL
		AIB053EB1	EB	N-BUTYLBENZENE	1.1	U	1.1 UGL
	LABQC	LB	LB	1-CHLOROHEXANE	0.5	R,U	0.5 UGL
	LABQC	LB	LB	TERT-BUTYLBENZENE	1.4	R,U	1.4 UGL
	LABQC	LB	LB	CHLOROBENZENE	0.4	U	0.4 UGL
	LABQC	LB	LB	TERT-BUTYLBENZENE	1.4	U	1.4 UGL
	LABQC	LB	LB	1,4-DICHLOROBENZENE	0.3	R,U	0.3 UGL
	LABQC	LB	LB	ETHYLBENZENE	0.6	U	0.6 UGL
	LABQC	LB	LB	DIABROMOCHLOROMETHANE	0.5	R,U	0.5 UGL
	LABQC	LB	LB	CIS-1,3-DICHLOROPROPENE	1	U	1 UGL
	LABQC	LB	LB	VINYL CHLORIDE	1.1	R,U	1.1 UGL
	LABQC	LB	LB	TETRACHLOROETHENE	1.4	U	1.4 UGL
	LABQC	LB	LB	P-ISOPROPYL TOLUENE	1.2	U	1.2 UGL
	LABQC	LB	LB	BROMOMETHANE	1.1	U	1.1 UGL
	LABQC	LB	LB	BROMOMETHANE	1.1	R,U	1.1 UGL
	LABQC	LB	LB	BENZENE	0.4	U	0.4 UGL
	LABQC	LB	LB	CHLOROMETHANE	1.3	R,U	1.3 UGL
	LABQC	LB	LB	O-XYLENE	1.1	U	1.1 UGL
	LABQC	LB	LB	O-XYLENE	1.1	R,U	1.1 UGL

SDG	Method Field ID	QCType	Analyte	Result	LabFlag	RL Units
9804237	SW8260A LABQC	LB	4-CHLOROTOLUENE	0.6	U	0.6 UGL
	LABQC	LB	N-BUTYLBENZENE	1.1	U	1.1 UGL
	LABQC	LB	TRICHLOROETHENE	1	U	1 UGL
	LABQC	LB	BROMOBENZENE	0.3	U	0.3 UGL
	LABQC	LB	BROMOFORM	1.2	U	1.2 UGL
	LABQC	LB	BROMOFORM	1.2	R,U	1.2 UGL
	LABQC	LB	ISOPROPYLBENZENE	0.5	U	0.5 UGL
	LABQC	LB	N-PROPYLBENZENE	0.4	R,U	0.4 UGL
	LABQC	LB	TOLUENE	1.1	U	1.1 UGL
	LABQC	LB	BROMOCHLOROMETHANE	0.4	R,U	0.4 UGL
	LABQC	LB	NAPHTHALENE	0.4	U	0.4 UGL
	LABQC	LB	CHLOROFORM	0.3	U	0.3 UGL
	LABQC	LB	BROMODICHLOROMETHANE	0.8	U	0.8 UGL
	LABQC	LB	TRANS-1,3-DICHLOROPROPENE	1	U	1 UGL
	LABQC	LB	CARBON TETRACHLORIDE	2.1	R,U	2.1 UGL
	LABQC	LB	METHYLENE CHLORIDE	2.7	R	0.3 UGL
	LABQC	LB	HEXACHLOROBUTADIENE	1.1	R,U	1.1 UGL
	LABQC	LB	HEXACHLOROBUTADIENE	1.1	U	1.1 UGL
	LABQC	LB	CIS-1,2-DICHLOROETHENE	1.2	U	1.2 UGL
	LABQC	LB	CHLOROETHANE	1	R,U	1 UGL
	LABQC	LB	CHLOROETHANE	1	U	1 UGL
	LABQC	LB	2,2-DICHLOROPROpane	3.5	R,U	3.5 UGL
	LABQC	LB	2,2-DICHLOROPROPANE	3.5	U	3.5 UGL
	LABQC	LB	STYRENE	0.4	U	0.4 UGL
	LABQC	LB	TRANS-1,2-DICHLOROETHENE	0.6	R,U	0.6 UGL
	LABQC	LB	TRICHLOROFLUOROMETHANE	0.8	U	0.8 UGL
	LABQC	LB	CARBON TETRACHLORIDE	2.1	U	2.1 UGL
	LABQC	LB	METHYLENE CHLORIDE	1.5	R	0.3 UGL
	LABQC	LB	DICHLORODIFLUOROMETHANE	1	R,U	1 UGL
	LABQC	LB	DICHLORODIFLUOROMETHANE	1	U	1 UGL
	LABQC	LB	DIBROMOMETHANE	2.4	U	2.4 UGL
	LABQC	LB	TRANS-1,2-DICHLOROETHENE	0.6	U	0.6 UGL
	LABQC	LB	2-CHLOROTOLUENE	0.4	U	0.4 UGL

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
9804237	SW8260A	LABQC	LB	m,p-xylene	1.3	U	1.3	UG/L
	LABQC	LB		TETRACHLOROETHENE	1.4	R,U	1.4	UG/L
	LABQC	LB		SEC-BUTYL BENZENE	1.3	R,U	1.3	UG/L
	LABQC	LB		m,p-xylene	1.3	R,U	1.3	UG/L
	LABQC	LB		DBROMOMETHANE	2.4	R,U	2.4	UG/L
	LABQC	LB		TRICHLOROFLUOROMETHANE	0.8	R,U	0.8	UG/L
	LABQC	LB		1,2-DICHLOROPROpane	0.4	R,U	0.4	UG/L
	LABQC	LB		1,2-DICHLOROPROpane	0.4	U	0.4	UG/L
	LABQC	LB		1,3-DICHLOROPROpane	0.4	U	0.4	UG/L
	LABQC	LB		1,1,1,2-TETRACHLOROETHANE	0.5	R,U	0.5	UG/L
	LABQC	LB		1,1,1-TRICHLOROETHANE	0.8	R,U	0.8	UG/L
	LABQC	LB		1,3,5-TRIMETHYL BENZENE	0.5	R,U	0.5	UG/L
	LABQC	LB		1,3,5-TRIMETHYL BENZENE	0.5	U	0.5	UG/L
	LABQC	LB		1,1,1,2-TETRACHLOROETHANE	0.5	U	0.5	UG/L
	LABQC	LB		1,1,2-TRICHLOROETHANE	1	U	1	UG/L
	LABQC	LB		1,3-DICHLOROBENZENE	1.2	U	1.2	UG/L
	LABQC	LB		1,1,1-TRICHLOROETHANE	0.8	U	0.8	UG/L
	LABQC	LB		1,1-DICHLOROETHANE	0.4	U	0.4	UG/L
	LABQC	LB		1,2,3-TRICHLOROPROPANE	3.2	U	3.2	UG/L
	LABQC	LB		1,1-DICHLOROPROPENE	1	U	1	UG/L
	LABQC	LB		1,1-DICHLOROPROPENE	1	R,U	1	UG/L
	LABQC	LB		1,1-DICHLOROETHENE	1.2	U	1.2	UG/L
	LABQC	LB		1,2,4-TRIMETHYL BENZENE	1.3	R,U	1.3	UG/L
	LABQC	LB		1,2,4-TRIMETHYL BENZENE	1.3	U	1.3	UG/L
	LABQC	LB		1,1,2-TRICHLOROETHANE	1	R,U	1	UG/L
	LABQC	LB		1,2-DIBROMO-3-CHLOROPROPANE	2.6	U	2.6	UG/L
	LABQC	LB		1,1,2,2-TETRACHLOROETHANE	0.4	U	0.4	UG/L
	LABQC	LB		1,1-DICHLOROETHANE	0.4	R,U	0.4	UG/L
	LABQC	LB		1,2-DIBROMOETHANE	0.6	U	0.6	UG/L
	LABQC	LB		1,2,3-TRICHLOROBENZENE	0.3	U	0.3	UG/L
	LABQC	LB		1,2-DICHLOROBENZENE	0.3	U	0.3	UG/L
	LABQC	LB		1,2,4-TRICHLOROBENZENE	0.4	U	0.4	UG/L
	LABQC	LB		1,2-DICHLOROETHANE	0.6	R,U	0.6	UG/L

652 810

SDG	Method	Field ID	QCType	Analyte	Result	LabFlag	RL	Units
C6554	RSK-175	SW8260A LABQC	LB	1,2-DICHLOROETHANE	0.6	U	0.6	UG/L
		LABQC	LB	1,1-DICHLOROETHENE	1.2	R,U	1.2	UG/L
C6562	RSK-175	AHA056EB1	EB	METHANE	0.324504	U	0.32	ug/L
		AHA062EB1	EB	METHANE	0.36864	U	0.37	ug/L
		MB1219	LB	METHANE	0.262424	U	0.26	ug/L
		AHA071EB1	EB	METHANE	0.349130	U	0.35	ug/L
		MB1219	LB	METHANE	0.262424	U	0.26	ug/L

TAB

G-3.3 LCS SUMMARY

LCS Summary

SDG	LabSampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
7154	LCS0429	RSK-175	BS	ETHENE			
7154	LCS0429	RSK-175	BS	METHANE	98		
7154	LCSD0429	RSK-175	BS	ETHENE			
7163	LCS0429	RSK-175	BS	ETHANE			
7163	LCSD0429	RSK-175	BS	ETHANE			
7163	LCSD0429	RSK-175	BS	METHANE	98		
9711001	VA971112-1LCS	SW8260A	BS	1,1,2-TETRACHLOROETHANE	100	72	125
9711001	VA971112-1LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	99	75	125
9711001	VA971112-1LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	88	74	125
9711001	VA971112-1LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	104	75	127
9711001	VA971112-1LCS	SW8260A	BS	1,1-DICHLOROETHANE	104	72	125
9711001	VA971112-1LCS	SW8260A	BS	1,1,1-DICHLOROETHANE	103	75	125
9711001	VA971112-1LCS	SW8260A	BS	1,1,1,1-TETRACHLOROETHANE	101	75	125
9711001	VA971112-1LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	93	75	137
9711001	VA971112-1LCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	106	75	125
9711001	VA971112-1LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	98	75	135
9711001	VA971112-1LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	106	75	125

SDG	LabSampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9711001	VA971112-1LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROPANE	86	59	125
9711001	VA971112-1LCS	SW8260A	BS	1,2-DIBROMOETHANE	103	75	125
9711001	VA971112-1LCS	SW8260A	BS	1,2-DICHLOROBENZENE	105	75	125
9711001	VA971112-1LCS	SW8260A	BS	1,2-DICHLOROETHANE	100	68	127
9711001	VA971112-1LCS	SW8260A	BS	1,2-DICHLOROPROPANE	107	70	125
9711001	VA971112-1LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	102	72	112
9711001	VA971112-1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	106	75	125
9711001	VA971112-1LCS	SW8260A	BS	1,3-DICHLOROPROPANE	106	75	125
9711001	VA971112-1LCS	SW8260A	BS	1,4-DICHLOROBENZENE	106	75	125
9711001	VA971112-1LCS	SW8260A	BS	1-CHLOROHEXANE	102	75	125
9711001	VA971112-1LCS	SW8260A	BS	2,2-DICHLOROPROPANE	88	75	125
9711001	VA971112-1LCS	SW8260A	BS	2-CHLOROTOLUENE	103	73	125
9711001	VA971112-1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	105	75	125
9711001	VA971112-1LCS	SW8260A	BS	4-CHLOROTOLUENE	100	74	125
9711001	VA971112-1LCS	SW8260A	BS	BENZENE	97	75	125
9711001	VA971112-1LCS	SW8260A	BS	BROMOBENZENE	108	75	125
9711001	VA971112-1LCS	SW8260A	BS	BROMOCHLOROMETHANE	111	73	125
9711001	VA971112-1LCS	SW8260A	BS	BROMODICHLOROMETHANE	99	75	125
9711001	VA971112-1LCS	SW8260A	BS	BROMOFORM	102	75	125
9711001	VA971112-1LCS	SW8260A	BS	BROMOMETHANE	107	72	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9711001	VA971112-1LCS	SW8260A	BS	CARBON TETRACHLORIDE	96	62	125
9711001	VA971112-1LCS	SW8260A	BS	CHLOROBENZENE	103	75	125
9711001	VA971112-1LCS	SW8260A	BS	CHLOROETHANE	99	65	125
9711001	VA971112-1LCS	SW8260A	BS	CHLOROFORM	97	74	125
9711001	VA971112-1LCS	SW8260A	BS	CHLOROMETHANE	99	75	125
9711001	VA971112-1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	104	75	125
9711001	VA971112-1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	97	74	125
9711001	VA971112-1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	99	73	125
9711001	VA971112-1LCS	SW8260A	BS	DIBROMOMETHANE	101	75	125
9711001	VA971112-1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	105	69	127
9711001	VA971112-1LCS	SW8260A	BS	ETHYL BENZENE	91	75	125
9711001	VA971112-1LCS	SW8260A	BS	HEXA CHLOROBUTADIENE	101	75	125
9711001	VA971112-1LCS	SW8260A	BS	ISOPROPYL BENZENE	97	75	125
9711001	VA971112-1LCS	SW8260A	BS	M, P-XYLENE	101	75	125
9711001	VA971112-1LCS	SW8260A	BS	METHYLENE CHLORIDE	56	75	125
9711001	VA971112-1LCS	SW8260A	BS	N-BUTYL BENZENE	103	75	125
9711001	VA971112-1LCS	SW8260A	BS	N-PROPYLBENZENE	101	75	125
9711001	VA971112-1LCS	SW8260A	BS	NAPHTHALENE	91	75	125
9711001	VA971112-1LCS	SW8260A	BS	O-XYLENE	100	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9711001	VA971112-1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	94	75	125
9711001	VA971112-1LCS	SW8260A	BS	SEC-BUTYL BENZENE	100	75	125
9711001	VA971112-1LCS	SW8260A	BS	STYRENE	105	75	125
9711001	VA971112-1LCS	SW8260A	BS	TERT-BUTYL BENZENE	98	75	125
9711001	VA971112-1LCS	SW8260A	BS	TETRACHLOROETHENE	100	71	125
9711001	VA971112-1LCS	SW8260A	BS	TOLUENE	99	74	125
9711001	VA971112-1LCS	SW8260A	BS	TOLUENE-D8	103	75	125
9711001	VA971112-1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	104	75	125
9711001	VA971112-1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	99	66	125
9711001	VA971112-1LCS	SW8260A	BS	TRICHLOROETHENE	115	71	125
9711001	VA971112-1LCS	SW8260A	BS	TRICHLOROFLUOROMETHANE	98	67	125
9711001	VA971112-1LCS	SW8260A	BS	VINYL CHLORIDE	102	46	134
9711018	9711018-5MSD	SW8260A	SD	1,1,1,2-TETRACHLOROETHANE	106	72	125
9711018	9711018-5MSD	SW8260A	SD	1,1,1-TRICHLOROETHANE	100	75	125
9711018	9711018-5MSD	SW8260A	SD	1,1,2,2-TETRACHLOROETHANE	100	74	125
9711018	9711018-5MSD	SW8260A	SD	1,1,2-TRICHLOROETHANE	103	75	127
9711018	9711018-5MSD	SW8260A	SD	1,1-DICHLOROETHANE	99	72	125
9711018	9711018-5MSD	SW8260A	SD	1,1,1-DICHLOROETHENE	101	75	125
9711018	9711018-5MSD	SW8260A	SD	1,1-DICHLOROPROPENE	98	75	125
9711018	9711018-5MSD	SW8260A	SD	1,2,3-TRICHLOROBENZENE	98	75	137

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9711018	9711018-5MSD	SW8260A	SD	1,2,3-TRICHLOROPROPANE	94	75	125
9711018	9711018-5MSD	SW8260A	SD	1,2,4-TRICHLOROBENZENE	100	75	135
9711018	9711018-5MSD	SW8260A	SD	1,2,4-TRIMETHYLBENZENE	114	75	125
9711018	9711018-5MSD	SW8260A	SD	1,2-DIBROMO-3-CHLOROPROPANE	85	59	125
9711018	9711018-5MSD	SW8260A	SD	1,2-DIBROMOETHANE	109	75	125
9711018	9711018-5MSD	SW8260A	SD	1,2-DICHLOROBENZENE	101	75	125
9711018	9711018-5MSD	SW8260A	SD	1,2-DICHLOROETHANE	97	68	127
9711018	9711018-5MSD	SW8260A	SD	1,2-DICHLOROPROPANE	100	70	125
9711018	9711018-5MSD	SW8260A	SD	1,3,5-TRIMETHYLBENZENE	96	72	112
9711018	9711018-5MSD	SW8260A	SD	1,3-DICHLOROBENZENE	96	75	125
9711018	9711018-5MSD	SW8260A	SD	1,3,DICHLOROPROPANE	104	75	125
9711018	9711018-5MSD	SW8260A	SD	1,4-DICHLOROBENZENE	95	75	125
9711018	9711018-5MSD	SW8260A	SD	1-CHLOROHEXANE	104	75	125
9711018	9711018-5MSD	SW8260A	SD	2,2-DICHLOROPROPANE	90	75	125
9711018	9711018-5MSD	SW8260A	SD	2-CHLOROTOLUENE	94	73	125
9711018	9711018-5MSD	SW8260A	SD	4-BROMOFLUOROBENZENE	95	75	125
9711018	9711018-5MSD	SW8260A	SD	4-CHLOROTOLUENE	95	74	125
9711018	9711018-5MSD	SW8260A	SD	BENZENE	93	75	125
9711018	9711018-5MSD	SW8260A	SD	BROMOBENZENE	100	75	125
9711018	9711018-5MSD	SW8260A	SD	BROMOCHLOROMETHANE	108	73	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	LowerLimit	Upper Limit
9711018	9711018-5MSD	SW8260A	SD	BROMODICHLOROMETHANE	97	75	125
9711018	9711018-5MSD	SW8260A	SD	BROMOFORM	110	75	125
9711018	9711018-5MSD	SW8260A	SD	BROMOMETHANE	109	72	125
9711018	9711018-5MSD	SW8260A	SD	CARBON TETRACHLORIDE	94	62	125
9711018	9711018-5MSD	SW8260A	SD	CHLOROBENZENE	105	75	125
9711018	9711018-5MSD	SW8260A	SD	CHLOROETHANE	100	65	125
9711018	9711018-5MSD	SW8260A	SD	CHLOROFORM	104	74	125
9711018	9711018-5MSD	SW8260A	SD	CHLORMETHANE	99	75	125
9711018	9711018-5MSD	SW8260A	SD	CIS-1,2-DICHLOROETHANE	118	75	125
9711018	9711018-5MSD	SW8260A	SD	CIS-1,3-DICHLOROPROPENE	96	74	125
9711018	9711018-5MSD	SW8260A	SD	DIBROMOCHLOROMETHANE	101	73	125
9711018	9711018-5MSD	SW8260A	SD	DIBROMOFLUOROMETHANE	108	75	125
9711018	9711018-5MSD	SW8260A	SD	DIBROMOMETHANE	103	69	127
9711018	9711018-5MSD	SW8260A	SD	DICHLORODIFLUOROMETHANE	91	75	125
9711018	9711018-5MSD	SW8260A	SD	ETHYL BENZENE	107	75	125
9711018	9711018-5MSD	SW8260A	SD	HEXA CHLOROBUTADIENE	93	75	125
9711018	9711018-5MSD	SW8260A	SD	ISOPROPYL BENZENE	96	75	125
9711018	9711018-5MSD	SW8260A	SD	M,P-XYLENE	110	75	125
9711018	9711018-5MSD	SW8260A	SD	METHYLENE CHLORIDE	55	75	125
9711018	9711018-5MSD	SW8260A	SD	N-BUTYL BENZENE	100	75	125

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9711018	9711018-5MSD	SW8260A	SD	N-PROPYLBENZENE	97	75	125
9711018	9711018-5MSD	SW8260A	SD	NAPHTHALENE	102	75	125
9711018	9711018-5MSD	SW8260A	SD	O-XYLENE	105	75	125
9711018	9711018-5MSD	SW8260A	SD	P-ISOPROPYL TOLUENE	96	75	125
9711018	9711018-5MSD	SW8260A	SD	SEC-BUTYL BENZENE	100	75	125
9711018	9711018-5MSD	SW8260A	SD	STYRENE	106	75	125
9711018	9711018-5MSD	SW8260A	SD	TERT-BUTYL BENZENE	94	75	125
9711018	9711018-5MSD	SW8260A	SD	TETRACHLOROETHENE	100	71	125
9711018	9711018-5MSD	SW8260A	SD	TOLUENE	97	74	125
9711018	9711018-5MSD	SW8260A	SD	TOLUENE-D8	102	75	125
9711018	9711018-5MSD	SW8260A	SD	TRANS-1,2-DICHLOROETHENE	100	75	125
9711018	9711018-5MSD	SW8260A	SD	TRANS-1,3-DICHLOROPROPENE	98	66	125
9711018	9711018-5MSD	SW8260A	SD	TRICHLOROETHENE	122	71	125
9711018	9711018-5MSD	SW8260A	SD	TRICHLOROFLUOROMETHANE	99	67	125
9711018	9711018-5MSD	SW8260A	SD	VINYL CHLORIDE	103	46	134
9711018	VA971112-1LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	100	72	125
9711018	VA971112-1LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	99	75	125
9711018	VA971112-1LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	88	74	125
9711018	VA971112-1LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	104	75	127
9711018	VA971112-1LCS	SW8260A	BS	1,1-DICHLOROETHANE	104	72	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9711018	VA971112-1LCS	SW8260A	BS	1,1-DICHLOROETHENE	103	75	125
9711018	VA971112-1LCS	SW8260A	BS	1,1-DICHLOROPROPENE	101	75	125
9711018	VA971112-1LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	93	75	137
9711018	VA971112-1LCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	106	75	125
9711018	VA971112-1LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	98	75	135
9711018	VA971112-1LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	106	75	125
9711018	VA971112-1LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROPANE	86	59	125
9711018	VA971112-1LCS	SW8260A	BS	1,2-DIBROMOETHANE	103	75	125
9711018	VA971112-1LCS	SW8260A	BS	1,2-DICHLOROBENZENE	105	75	125
9711018	VA971112-1LCS	SW8260A	BS	1,2-DICHLOROETHANE	100	68	127
9711018	VA971112-1LCS	SW8260A	BS	1,2-DICHLOROPROPANE	107	70	125
9711018	VA971112-1LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	102	72	112
9711018	VA971112-1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	106	75	125
9711018	VA971112-1LCS	SW8260A	BS	1,3-DICHLOROPROPANE	106	75	125
9711018	VA971112-1LCS	SW8260A	BS	1,4-DICHLOROBENZENE	106	75	125
9711018	VA971112-1LCS	SW8260A	BS	1-CHLOROHEXANE	102	75	125
9711018	VA971112-1LCS	SW8260A	BS	2,2-DICHLOROPROPANE	88	75	125
9711018	VA971112-1LCS	SW8260A	BS	2-CHLOROTOLUENE	103	73	125
9711018	VA971112-1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	105	75	125
9711018	VA971112-1LCS	SW8260A	BS	4-CHLOROTOLUENE	100	74	125

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9711018	VA971112-1LCS	SW8260A	BS	BENZENE	97	75	125
9711018	VA971112-1LCS	SW8260A	BS	BROMOBENZENE	108	75	125
9711018	VA971112-1LCS	SW8260A	BS	BROMOCHLOROMETHANE	111	73	125
9711018	VA971112-1LCS	SW8260A	BS	BROMODICHLOROMETHANE	99	75	125
9711018	VA971112-1LCS	SW8260A	BS	BROMOFORM	102	75	125
9711018	VA971112-1LCS	SW8260A	BS	BROMOMETHANE	107	72	125
9711018	VA971112-1LCS	SW8260A	BS	CARBON TETRACHLORIDE	96	62	125
9711018	VA971112-1LCS	SW8260A	BS	CHLOROBENZENE	103	75	125
9711018	VA971112-1LCS	SW8260A	BS	CHLOROETHANE	99	65	125
9711018	VA971112-1LCS	SW8260A	BS	CHLOROFORM	97	74	125
9711018	VA971112-1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	99	75	125
9711018	VA971112-1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	104	75	125
9711018	VA971112-1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	97	74	125
9711018	VA971112-1LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	99	73	125
9711018	VA971112-1LCS	SW8260A	BS	DIBROMOMETHANE	101	75	125
9711018	VA971112-1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	105	69	127
9711018	VA971112-1LCS	SW8260A	BS	ETHYL BENZENE	101	75	125
9711018	VA971112-1LCS	SW8260A	BS	HEXACHLOROBUTADIENE	97	75	125
9711018	VA971112-1LCS	SW8260A	BS	ISOPROPYL BENZENE	101	75	125

SDG	LabSampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9711018	VA971112-1LCS	SW8260A	BS	M,P-XYLENE	101	75	125
9711018	VA971112-1LCS	SW8260A	BS	METHYLENE CHLORIDE	56	75	125
9711018	VA971112-1LCS	SW8260A	BS	N-BUTYLBENZENE	103	75	125
9711018	VA971112-1LCS	SW8260A	BS	N-PROPYLBENZENE	101	75	125
9711018	VA971112-1LCS	SW8260A	BS	NAPHTHALENE	91	75	125
9711018	VA971112-1LCS	SW8260A	BS	O-XYLENE	100	75	125
9711018	VA971112-1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	94	75	125
9711018	VA971112-1LCS	SW8260A	BS	SEC-BUTYL BENZENE	100	75	125
9711018	VA971112-1LCS	SW8260A	BS	STYRENE	105	75	125
9711018	VA971112-1LCS	SW8260A	BS	TERT-BUTYL BENZENE	98	75	125
9711018	VA971112-1LCS	SW8260A	BS	TETRACHLOROETHENE	100	71	125
9711018	VA971112-1LCS	SW8260A	BS	TOLUENE	99	74	125
9711018	VA971112-1LCS	SW8260A	BS	TOLUENE-D8	103	75	125
9711018	VA971112-1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	104	75	125
9711018	VA971112-1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	99	66	125
9711018	VA971112-1LCS	SW8260A	BS	TRICHLOROETHENE	115	71	125
9711018	VA971112-1LCS	SW8260A	BS	TRICHLOROFLUOROMETHANE	98	67	125
9711018	VA971112-1LCS	SW8260A	BS	VINYL CHLORIDE	102	46	134
9711193	9711193-3MSD	SW8260A	SD	1,1,1,2-TETRACHLOROETHANE	92		
9711193	9711193-3MSD	SW8260A	SD	1,1,1-TRICHLOROETHANE	105		

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9711193	9711193-3MSD	SW8260A	SD	1,1,2,2-TETRACHLOROETHANE	101		
9711193	9711193-3MSD	SW8260A	SD	1,1,2-TRICHLOROETHANE	102		
9711193	9711193-3MSD	SW8260A	SD	1,1-DICHLOROETHANE	108		
9711193	9711193-3MSD	SW8260A	SD	1,1-DICHLOROETHENE	119		
9711193	9711193-3MSD	SW8260A	SD	1,1-DICHLOROPROPENE	109		
9711193	9711193-3MSD	SW8260A	SD	1,2,3-TRICHLOROBENZENE	89		
9711193	9711193-3MSD	SW8260A	SD	1,2,3-TRICHLOROPROPANE	107		
9711193	9711193-3MSD	SW8260A	SD	1,2,4-TRICHLOROBENZENE	89		
9711193	9711193-3MSD	SW8260A	SD	1,2,4-TRIMETHYLBENZENE	94		
9711193	9711193-3MSD	SW8260A	SD	1,2-DIBROMO-3-CHLOROPROPANE	104		
9711193	9711193-3MSD	SW8260A	SD	1,2-DIBROMOETHANE	93		
9711193	9711193-3MSD	SW8260A	SD	1,2-DICHLOROBENZENE	95		
9711193	9711193-3MSD	SW8260A	SD	1,2-DICHLOROETHANE	108		
9711193	9711193-3MSD	SW8260A	SD	1,2-DICHLOROPROPANE	100		
9711193	9711193-3MSD	SW8260A	SD	1,3,5-TRIMETHYLBENZENE	96		
9711193	9711193-3MSD	SW8260A	SD	1,3-DICHLOROBENZENE	95		
9711193	9711193-3MSD	SW8260A	SD	1,3-DICHLOROPROPANE	96		
9711193	9711193-3MSD	SW8260A	SD	1,4-DICHLOROBENZENE	99		
9711193	9711193-3MSD	SW8260A	SD	1-CHLOROHEXANE	95		
9711193	9711193-3MSD	SW8260A	SD	2,2-DICHLOROPROPANE	98		

SDG	LabSampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9711193	9711193-3MSD	SW8260A	SD	2-CHLOROTOLUENE	99		
9711193	9711193-3MSD	SW8260A	SD	4-BROMOFLUOROBENZENE	99		
9711193	9711193-3MSD	SW8260A	SD	4-CHLOROTOLUENE	92		
9711193	9711193-3MSD	SW8260A	SD	BENZENE	101		
9711193	9711193-3MSD	SW8260A	SD	BROMOBENZENE	105		
9711193	9711193-3MSD	SW8260A	SD	BROMOCHLOROMETHANE	103		
9711193	9711193-3MSD	SW8260A	SD	BROMODICHLOROMETHANE	100		
9711193	9711193-3MSD	SW8260A	SD	BROMOFORM	89		
9711193	9711193-3MSD	SW8260A	SD	BROMOMETHANE	106		
9711193	9711193-3MSD	SW8260A	SD	CARBON TETRACHLORIDE	108		
9711193	9711193-3MSD	SW8260A	SD	CHLOROBENZENE	95		
9711193	9711193-3MSD	SW8260A	SD	CHLOROETHANE	127		
9711193	9711193-3MSD	SW8260A	SD	CHLOROFORM	106		
9711193	9711193-3MSD	SW8260A	SD	CHLORMETHANE	113		
9711193	9711193-3MSD	SW8260A	SD	CIS-1,2-DICHLOROETHENE	103		
9711193	9711193-3MSD	SW8260A	SD	CIS-1,3-DICHLOROPROPENE	103		
9711193	9711193-3MSD	SW8260A	SD	DIBROMOCHLOROMETHANE	90		
9711193	9711193-3MSD	SW8260A	SD	DIBROMOFLUOROMETHANE	109		
9711193	9711193-3MSD	SW8260A	SD	DIBROMOMETHANE	102		
9711193	9711193-3MSD	SW8260A	SD	DICHLORODIFLUOROMETHANE	67		

SDG	LabSampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9711193	9711193-3MSD	SW8260A	SD	ETHYLBENZENE	98		
9711193	9711193-3MSD	SW8260A	SD	HEXACHLOROBUTADIENE	90		
9711193	9711193-3MSD	SW8260A	SD	ISOPROPYLBENZENE	100		
9711193	9711193-3MSD	SW8260A	SD	M+P-XYLENE	95		
9711193	9711193-3MSD	SW8260A	SD	METHYLENE CHLORIDE	5		
9711193	9711193-3MSD	SW8260A	SD	N-BUTYLBENZENE	97		
9711193	9711193-3MSD	SW8260A	SD	N-PROPYLBENZENE	106		
9711193	9711193-3MSD	SW8260A	SD	NAPHTHALENE	99		
9711193	9711193-3MSD	SW8260A	SD	O-XYLENE	96		
9711193	9711193-3MSD	SW8260A	SD	P-ISOPROPYL TOLUENE	95		
9711193	9711193-3MSD	SW8260A	SD	SEC-BUTYL BENZENE	97		
9711193	9711193-3MSD	SW8260A	SD	STYRENE	93		
9711193	9711193-3MSD	SW8260A	SD	TERT-BUTYL BENZENE	101		
9711193	9711193-3MSD	SW8260A	SD	TETRACHLOROETHENE	90		
9711193	9711193-3MSD	SW8260A	SD	TOLUENE	93		
9711193	9711193-3MSD	SW8260A	SD	TOLUENE-D8	99		
9711193	9711193-3MSD	SW8260A	SD	TRANS-1,2-DICHLOROETHENE	106		
9711193	9711193-3MSD	SW8260A	SD	TRANS-1,3-DICHLOROPROPENE	97		
9711193	9711193-3MSD	SW8260A	SD	TRICHLOROETHENE	101		
9711193	9711193-3MSD	SW8260A	SD	TRICHLOROFLUOROMETHANE	118		

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>LowerLimit</u>	<u>Upper Limit</u>
9711193	9711193-3MSD	SW8260A	SD	VINYL CHLORIDE	124		
9711193	VA971121-1LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	102	72	125
9711193	VA971121-1LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	99	75	125
9711193	VA971121-1LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	99	74	125
9711193	VA971121-1LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	106	75	127
9711193	VA971121-1LCS	SW8260A	BS	1,1-DICHLOROETHANE	101	72	125
9711193	VA971121-1LCS	SW8260A	BS	1,1-DICHLOROETHENE	100	75	125
9711193	VA971121-1LCS	SW8260A	BS	1,1-DICHLOROPROPENE	95	75	125
9711193	VA971121-1LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	88	75	137
9711193	VA971121-1LCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	105	75	125
9711193	VA971121-1LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	92	75	135
9711193	VA971121-1LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	95	75	125
9711193	VA971121-1LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROpane	99	59	125
9711193	VA971121-1LCS	SW8260A	BS	1,2-DIBROMOETHANE	109	75	125
9711193	VA971121-1LCS	SW8260A	BS	1,2-DICHLOROBENZENE	97	75	125
9711193	VA971121-1LCS	SW8260A	BS	1,2-DICHLOROPROPANE	101	70	125
9711193	VA971121-1LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	95	72	112
9711193	VA971121-1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	89	75	125
9711193	VA971121-1LCS	SW8260A	BS	1,3-DICHLOROPROPANE	103	75	125

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>LowerLimit</u>	<u>Upper Limit</u>
9711193	VA971121-1LCS	SW8260A	BS	1,4-DICHLOROBENZENE	95	75	125
9711193	VA971121-1LCS	SW8260A	BS	1-CHLOROHEXANE	93	75	125
9711193	VA971121-1LCS	SW8260A	BS	2,2-DICHLOROPROPANE	94	75	125
9711193	VA971121-1LCS	SW8260A	BS	2-CHLOROTOLUENE	97	73	125
9711193	VA971121-1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	105	75	125
9711193	VA971121-1LCS	SW8260A	BS	4-CHLOROTOLUENE	92	74	125
9711193	VA971121-1LCS	SW8260A	BS	BENZENE	94	75	125
9711193	VA971121-1LCS	SW8260A	BS	BROMOBENZENE	104	75	125
9711193	VA971121-1LCS	SW8260A	BS	BROMOCHLOROMETHANE	106	73	125
9711193	VA971121-1LCS	SW8260A	BS	BROMODICHLOROMETHANE	102	75	125
9711193	VA971121-1LCS	SW8260A	BS	BROMOFORM	110	75	125
9711193	VA971121-1LCS	SW8260A	BS	BROMOMETHANE	106	72	125
9711193	VA971121-1LCS	SW8260A	BS	CARBON TETRACHLORIDE	95	62	125
9711193	VA971121-1LCS	SW8260A	BS	CHLOROBENZENE	97	75	125
9711193	VA971121-1LCS	SW8260A	BS	CHLOROETHANE	92	65	125
9711193	VA971121-1LCS	SW8260A	BS	CHLOROMETHANE	88	75	125
9711193	VA971121-1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	107	75	125
9711193	VA971121-1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	98	74	125
9711193	VA971121-1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	105	73	125

SDG	LabsampleID	Method	QC Type	Analyte	% Recovery	Lower Limit	Upper Limit
9711193	VA971121-1LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	108	75	125
9711193	VA971121-1LCS	SW8260A	BS	DIBROMOMETHANE	113	69	127
9711193	VA971121-1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	89	75	125
9711193	VA971121-1LCS	SW8260A	BS	ETHYLBENZENE	96	75	125
9711193	VA971121-1LCS	SW8260A	BS	HEXACHLOROBUTADIENE	92	75	125
9711193	VA971121-1LCS	SW8260A	BS	ISOPROPYLBENZENE	92	75	125
9711193	VA971121-1LCS	SW8260A	BS	M,P-XYLENE	102	75	125
9711193	VA971121-1LCS	SW8260A	BS	METHYLENE CHLORIDE	120	75	125
9711193	VA971121-1LCS	SW8260A	BS	N-BUTYLBENZENE	82	75	125
9711193	VA971121-1LCS	SW8260A	BS	N-PROPYLBENZENE	94	75	125
9711193	VA971121-1LCS	SW8260A	BS	NAPHTHALENE	85	75	125
9711193	VA971121-1LCS	SW8260A	BS	O-XYLENE	99	75	125
9711193	VA971121-1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	84	75	125
9711193	VA971121-1LCS	SW8260A	BS	SEC-BUTYL BENZENE	93	75	125
9711193	VA971121-1LCS	SW8260A	BS	STYRENE	104	75	125
9711193	VA971121-1LCS	SW8260A	BS	TERT-BUTYL BENZENE	88	75	125
9711193	VA971121-1LCS	SW8260A	BS	TETRACHLOROETHENE	92	71	125
9711193	VA971121-1LCS	SW8260A	BS	TOLUENE	97	74	125
9711193	VA971121-1LCS	SW8260A	BS	TOLUENE-D8	102	75	125
9711193	VA971121-1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	100	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9711193	VA971121-1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	110	66	125
9711193	VA971121-1LCS	SW8260A	BS	TRICHLOROETHENE	97	71	125
9711193	VA971121-1LCS	SW8260A	BS	TRICHLOROFLUOROMETHANE	103	67	125
9711193	VA971121-1LCS	SW8260A	BS	VINYL CHLORIDE	96	46	134
9711193	VB971124-1LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	101	62	108
9711193	VB971124-1LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	98	65	135
9711193	VB971124-1LCS	SW8260A	BS	1,1,2-TETRACHLOROETHANE	96	64	135
9711193	VB971124-1LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	95	65	135
9711193	VB971124-1LCS	SW8260A	BS	1,1-TRICHLOROETHANE	98	62	135
9711193	VB971124-1LCS	SW8260A	BS	1,1-DICHLOROETHANE	101	65	135
9711193	VB971124-1LCS	SW8260A	BS	1,1-DICHLOROETHENE	99	65	135
9711193	VB971124-1LCS	SW8260A	BS	1,1-DICHLOROPROPENE	90	65	147
9711193	VB971124-1LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	87	65	145
9711193	VB971124-1LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	90	65	135
9711193	VB971124-1LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	93	65	135
9711193	VB971124-1LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROPANE	100	49	135
9711193	VB971124-1LCS	SW8260A	BS	1,2-DIBROMOETHANE	100	65	135
9711193	VB971124-1LCS	SW8260A	BS	1,2-DICHLOROBENZENE	97	65	135
9711193	VB971124-1LCS	SW8260A	BS	1,2-DICHLOROETHANE	96	58	137
9711193	VB971124-1LCS	SW8260A	BS	1,2-DICHLOROPROPANE	93	60	135

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9711193	VB971124-1LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	91	62	135
9711193	VB971124-1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	90	65	135
9711193	VB971124-1LCS	SW8260A	BS	1,3-DICHLOROPROpane	103	65	135
9711193	VB971124-1LCS	SW8260A	BS	1,4-DICHLOROBENZENE	95	65	135
9711193	VB971124-1LCS	SW8260A	BS	1-CHLOROHEXANE	97	65	135
9711193	VB971124-1LCS	SW8260A	BS	2,2-DICHLOROPROPANE	92	65	135
9711193	VB971124-1LCS	SW8260A	BS	2-CHLOROTOLUENE	91	63	135
9711193	VB971124-1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	93	65	135
9711193	VB971124-1LCS	SW8260A	BS	4-CHLOROTOLUENE	91	64	135
9711193	VB971124-1LCS	SW8260A	BS	BENZENE	94	65	135
9711193	VB971124-1LCS	SW8260A	BS	BROMOBENZENE	89	65	135
9711193	VB971124-1LCS	SW8260A	BS	BROMOCHLOROMETHANE	95	63	135
9711193	VB971124-1LCS	SW8260A	BS	BROMODICHLOROMETHANE	95	65	135
9711193	VB971124-1LCS	SW8260A	BS	BROMOFORM	100	65	135
9711193	VB971124-1LCS	SW8260A	BS	BROMOMETHANE	98	62	135
9711193	VB971124-1LCS	SW8260A	BS	CARBON TETRACHLORIDE	97	52	135
9711193	VB971124-1LCS	SW8260A	BS	CHLOROBENZENE	98	65	135
9711193	VB971124-1LCS	SW8260A	BS	CHLOROETHANE	111	55	135
9711193	VB971124-1LCS	SW8260A	BS	CHLOROFORM	98	64	135
9711193	VB971124-1LCS	SW8260A	BS	CHLORMETHANE	91	65	135

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9711193	VB971124-1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	99	65	135
9711193	VB971124-1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	98	64	135
9711193	VB971124-1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	94	63	135
9711193	VB971124-1LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	105	65	135
9711193	VB971124-1LCS	SW8260A	BS	DIBROMOMETHANE	100	59	137
9711193	VB971124-1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	101	65	135
9711193	VB971124-1LCS	SW8260A	BS	ETHYL BENZENE	99	65	135
9711193	VB971124-1LCS	SW8260A	BS	HEXA CHLOROBUTADIENE	85	65	135
9711193	VB971124-1LCS	SW8260A	BS	ISOPROPYL BENZENE	93	65	135
9711193	VB971124-1LCS	SW8260A	BS	M,P-XYLENE	99	65	135
9711193	VB971124-1LCS	SW8260A	BS	METHYLENE CHLORIDE	82	65	135
9711193	VB971124-1LCS	SW8260A	BS	N-BUTYL BENZENE	90	65	135
9711193	VB971124-1LCS	SW8260A	BS	N-PROPYL BENZENE	92	65	135
9711193	VB971124-1LCS	SW8260A	BS	NAPHTHALENE	95	65	135
9711193	VB971124-1LCS	SW8260A	BS	O-XYLENE	100	65	135
9711193	VB971124-1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	91	65	135
9711193	VB971124-1LCS	SW8260A	BS	SEC-BUTYL BENZENE	90	65	135
9711193	VB971124-1LCS	SW8260A	BS	STYRENE	101	65	135
9711193	VB971124-1LCS	SW8260A	BS	TERT-BUTYL BENZENE	94	65	135
9711193	VB971124-1LCS	SW8260A	BS	TETRACHLOROETHENE	95	61	135

SDG	LabSampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9711193	VB971124-1LCS	SW8260A	BS	TOLUENE	92	64	135
9711193	VB971124-1LCS	SW8260A	BS	TOLUENE-D8	100	65	135
9711193	VB971124-1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	99	65	135
9711193	VB971124-1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	98	56	135
9711193	VB971124-1LCS	SW8260A	BS	TRICHLOROETHENE	97	61	135
9711193	VB971124-1LCS	SW8260A	BS	TRICHLOROFLUOROMETHANE	100	57	135
9711193	VB971124-1LCS	SW8260A	BS	VINYL CHLORIDE	102	36	144
9711209	VA971124-1LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	101	72	125
9711209	VA971124-1LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	102	75	125
9711209	VA971124-1LCS	SW8260A	BS	1,1,2-TETRACHLOROETHANE	93	74	125
9711209	VA971124-1LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	109	75	127
9711209	VA971124-1LCS	SW8260A	BS	1,1-DICHLOROETHANE	97	72	125
9711209	VA971124-1LCS	SW8260A	BS	1,1,1-DICHLOROETHANE	95	75	125
9711209	VA971124-1LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	79	75	137
9711209	VA971124-1LCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	106	75	125
9711209	VA971124-1LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	90	75	135
9711209	VA971124-1LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	96	75	125
9711209	VA971124-1LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROPANE	81	59	125
9711209	VA971124-1LCS	SW8260A	BS	1,2-DIBROMOETHANE	107	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9711209	VA971124-1LCS	SW8260A	BS	1,2-DICHLOROBENZENE	92	75	125
9711209	VA971124-1LCS	SW8260A	BS	1,2-DICHLOROETHANE	111	68	127
9711209	VA971124-1LCS	SW8260A	BS	1,2-DICHLOROPROpane	102	70	125
9711209	VA971124-1LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	94	72	112
9711209	VA971124-1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	92	75	125
9711209	VA971124-1LCS	SW8260A	BS	1,3-DICHLOROPROpane	106	75	125
9711209	VA971124-1LCS	SW8260A	BS	1,4-DICHLOROBENZENE	98	75	125
9711209	VA971124-1LCS	SW8260A	BS	1,4-DICHLOROHEXANE	96	75	125
9711209	VA971124-1LCS	SW8260A	BS	2,2-DICHLOROPROpane	101	75	125
9711209	VA971124-1LCS	SW8260A	BS	2-CHLOROTOLUENE	88	73	125
9711209	VA971124-1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	101	75	125
9711209	VA971124-1LCS	SW8260A	BS	4-CHLOROTOLUENE	93	74	125
9711209	VA971124-1LCS	SW8260A	BS	BENZENE	96	75	125
9711209	VA971124-1LCS	SW8260A	BS	BROMOBENZENE	101	75	125
9711209	VA971124-1LCS	SW8260A	BS	BROMOCHLOROMETHANE	101	73	125
9711209	VA971124-1LCS	SW8260A	BS	BROMODICHLOROMETHANE	107	75	125
9711209	VA971124-1LCS	SW8260A	BS	BROMOFORM	106	75	125
9711209	VA971124-1LCS	SW8260A	BS	BROMOMETHANE	108	72	125
9711209	VA971124-1LCS	SW8260A	BS	CARBON TETRACHLORIDE	104	62	125
9711209	VA971124-1LCS	SW8260A	BS	CHLOROBENZENE	96	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9711209	VA971124-1LCS	SW8260A	BS	CHLOROETHANE	99	65	125
9711209	VA971124-1LCS	SW8260A	BS	CHLOROFORM	97	74	125
9711209	VA971124-1LCS	SW8260A	BS	CHLROMETHANE	92	75	125
9711209	VA971124-1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	101	75	125
9711209	VA971124-1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	102	74	125
9711209	VA971124-1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	98	73	125
9711209	VA971124-1LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	107	75	125
9711209	VA971124-1LCS	SW8260A	BS	DIBROMOMETHANE	111	69	127
9711209	VA971124-1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	108	75	125
9711209	VA971124-1LCS	SW8260A	BS	ETHYLBENZENE	99	75	125
9711209	VA971124-1LCS	SW8260A	BS	HEXACHLOROBUTADIENE	97	75	125
9711209	VA971124-1LCS	SW8260A	BS	ISOPROPYLBENZENE	94	75	125
9711209	VA971124-1LCS	SW8260A	BS	M,P-XYLENE	99	75	125
9711209	VA971124-1LCS	SW8260A	BS	METHYLENE CHLORIDE	51	75	125
9711209	VA971124-1LCS	SW8260A	BS	N-BUTYLBENZENE	87	75	125
9711209	VA971124-1LCS	SW8260A	BS	N-PROPYLBENZENE	93	75	125
9711209	VA971124-1LCS	SW8260A	BS	NAPHTHALENE	72	75	125
9711209	VA971124-1LCS	SW8260A	BS	O-XYLENE	100	75	125
9711209	VA971124-1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	88	75	125
9711209	VA971124-1LCS	SW8260A	BS	SEC-BUTYL BENZENE	96	75	125

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9711209	VA971124-1LCS	SW8260A	BS	STYRENE	102	75	125
9711209	VA971124-1LCS	SW8260A	BS	TERT-BUTYL BENZENE	88	75	125
9711209	VA971124-1LCS	SW8260A	BS	TETRACHLOROETHENE	94	71	125
9711209	VA971124-1LCS	SW8260A	BS	TOLUENE	100	74	125
9711209	VA971124-1LCS	SW8260A	BS	TOLUENE-D8	103	75	125
9711209	VA971124-1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	96	75	125
9711209	VA971124-1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	109	66	125
9711209	VA971124-1LCS	SW8260A	BS	TRICHLOROETHENE	99	71	125
9711209	VA971124-1LCS	SW8260A	BS	TRICHLOROFLUOROMETHANE	109	67	125
9711209	VA971124-1LCS	SW8260A	BS	VINYL CHLORIDE	104	46	134
9711222	VA971124-1LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	101	72	125
9711222	VA971124-1LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	102	75	125
9711222	VA971124-1LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	93	74	125
9711222	VA971124-1LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	109	75	127
9711222	VA971124-1LCS	SW8260A	BS	1,1,1,2-DICHLOROETHANE	97	72	125
9711222	VA971124-1LCS	SW8260A	BS	1,1-DICHLOROETHANE	95	75	125
9711222	VA971124-1LCS	SW8260A	BS	1,1-DICHLOROPROPENE	106	75	125
9711222	VA971124-1LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	79	75	137
9711222	VA971124-1LCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	98	75	125
9711222	VA971124-1LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	90	75	135

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9711222	VA971124-1LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	96	75	125
9711222	VA971124-1LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROPANE	81	59	125
9711222	VA971124-1LCS	SW8260A	BS	1,2-DIBROMOETHANE	107	75	125
9711222	VA971124-1LCS	SW8260A	BS	1,2-DICHLOROBENZENE	92	75	125
9711222	VA971124-1LCS	SW8260A	BS	1,2-DICHLOROETHANE	111	68	127
9711222	VA971124-1LCS	SW8260A	BS	1,2-DICHLOROPROPANE	102	70	125
9711222	VA971124-1LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	94	72	112
9711222	VA971124-1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	92	75	125
9711222	VA971124-1LCS	SW8260A	BS	1,3-DICHLOROPROPANE	106	75	125
9711222	VA971124-1LCS	SW8260A	BS	1,4-DICHLOROBENZENE	98	75	125
9711222	VA971124-1LCS	SW8260A	BS	1-CHLOROHEXANE	96	75	125
9711222	VA971124-1LCS	SW8260A	BS	2,2-DICHLOROPROPANE	101	75	125
9711222	VA971124-1LCS	SW8260A	BS	2-CHLORTOLUENE	88	73	125
9711222	VA971124-1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	101	75	125
9711222	VA971124-1LCS	SW8260A	BS	4-CHLORTOLUENE	93	74	125
9711222	VA971124-1LCS	SW8260A	BS	BENZENE	96	75	125
9711222	VA971124-1LCS	SW8260A	BS	BROMOBENZENE	101	75	125
9711222	VA971124-1LCS	SW8260A	BS	BROMOCHLOROMETHANE	101	73	125
9711222	VA971124-1LCS	SW8260A	BS	BROMODICHLOROMETHANE	107	75	125
9711222	VA971124-1LCS	SW8260A	BS	BROMOFORM	106	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9711222	VA971124-1LCS	SW8260A	BS	BROMOMETHANE	108	72	125
9711222	VA971124-1LCS	SW8260A	BS	CARBON TETRACHLORIDE	104	62	125
9711222	VA971124-1LCS	SW8260A	BS	CHLOROBENZENE	96	75	125
9711222	VA971124-1LCS	SW8260A	BS	CHLOROETHANE	99	65	125
9711222	VA971124-1LCS	SW8260A	BS	CHLOROFORM	97	74	125
9711222	VA971124-1LCS	SW8260A	BS	CHLOROMETHANE	92	75	125
9711222	VA971124-1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	101	75	125
9711222	VA971124-1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	102	74	125
9711222	VA971124-1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	98	73	125
9711222	VA971124-1LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	107	75	125
9711222	VA971124-1LCS	SW8260A	BS	DIBROMOMETHANE	111	69	127
9711222	VA971124-1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	108	75	125
9711222	VA971124-1LCS	SW8260A	BS	ETHYLBENZENE	99	75	125
9711222	VA971124-1LCS	SW8260A	BS	HEXACHLOROBUTADIENE	97	75	125
9711222	VA971124-1LCS	SW8260A	BS	ISOPROPYLBENZENE	94	75	125
9711222	VA971124-1LCS	SW8260A	BS	M,P-XYLENE	99	75	125
9711222	VA971124-1LCS	SW8260A	BS	METHYLENE CHLORIDE	51	75	125
9711222	VA971124-1LCS	SW8260A	BS	N-BUTYLBENZENE	87	75	125
9711222	VA971124-1LCS	SW8260A	BS	N-PROPYLBENZENE	93	75	125
9711222	VA971124-1LCS	SW8260A	BS	NAPHTHALENE	72	75	125

SDG	LabSampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9711222	VA971124-1LCS	SW8260A	BS	O-XYLENE	100	75	125
9711222	VA971124-1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	88	75	125
9711222	VA971124-1LCS	SW8260A	BS	SEC-BUTYL BENZENE	96	75	125
9711222	VA971124-1LCS	SW8260A	BS	STYRENE	102	75	125
9711222	VA971124-1LCS	SW8260A	BS	TERT-BUTYL BENZENE	88	75	125
9711222	VA971124-1LCS	SW8260A	BS	TETRACHLOROETHENE	94	71	125
9711222	VA971124-1LCS	SW8260A	BS	TOLUENE	100	74	125
9711222	VA971124-1LCS	SW8260A	BS	TOLUENE-D8	103	75	125
9711222	VA971124-1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	96	75	125
9711222	VA971124-1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	109	66	125
9711222	VA971124-1LCS	SW8260A	BS	TRICHLOROETHENE	99	71	125
9711222	VA971124-1LCS	SW8260A	BS	TRICHLOROFLUOROMETHANE	109	67	125
9711222	VA971124-1LCS	SW8260A	BS	VINYL CHLORIDE	104	46	134
9711254	VA971124-1LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	101	72	125
9711254	VA971124-1LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	102	75	125
9711254	VA971124-1LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	93	74	125
9711254	VA971124-1LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	109	75	127
9711254	VA971124-1LCS	SW8260A	BS	1,1-DICHLOROETHANE	97	72	125
9711254	VA971124-1LCS	SW8260A	BS	1,1-DICHLOROETHENE	95	75	125
9711254	VA971124-1LCS	SW8260A	BS	1,1-DICHLOROPROPENE	106	75	125

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9711254	VA971124-1LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	79	75	137
9711254	VA971124-1LCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	98	75	125
9711254	VA971124-1LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	90	75	135
9711254	VA971124-1LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	96	75	125
9711254	VA971124-1LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROPANE	81	59	125
9711254	VA971124-1LCS	SW8260A	BS	1,2-DIBROMOETHANE	107	75	125
9711254	VA971124-1LCS	SW8260A	BS	1,2-DICHLOROBENZENE	92	?	75
9711254	VA971124-1LCS	SW8260A	BS	1,2-DICHLOROETHANE	111	68	127
9711254	VA971124-1LCS	SW8260A	BS	1,2-DICHLOROPROPANE	102	70	125
9711254	VA971124-1LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	94	72	112
9711254	VA971124-1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	92	75	125
9711254	VA971124-1LCS	SW8260A	BS	1,3-DICHLOROPROPANE	106	75	125
9711254	VA971124-1LCS	SW8260A	BS	1,4-DICHLOROBENZENE	98	75	125
9711254	VA971124-1LCS	SW8260A	BS	1-CHLOROHEXANE	96	75	125
9711254	VA971124-1LCS	SW8260A	BS	2,2-DICHLOROPROPANE	101	75	125
9711254	VA971124-1LCS	SW8260A	BS	2-CHLOROTOLUENE	88	73	125
9711254	VA971124-1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	101	75	125
9711254	VA971124-1LCS	SW8260A	BS	4-CHLOROTOLUENE	93	74	125
9711254	VA971124-1LCS	SW8260A	BS	BENZENE	96	75	125
9711254	VA971124-1LCS	SW8260A	BS	BROMOBENZENE	101	75	125

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9711254	VA971124-1LCS	SW8260A	BS	BROMOCHLOROMETHANE	101	73	125
9711254	VA971124-1LCS	SW8260A	BS	BROMODICHLOROMETHANE	107	75	125
9711254	VA971124-1LCS	SW8260A	BS	BROMOFORM	106	75	125
9711254	VA971124-1LCS	SW8260A	BS	BROMOMETHANE	108	72	125
9711254	VA971124-1LCS	SW8260A	BS	CARBON TETRACHLORIDE	104	62	125
9711254	VA971124-1LCS	SW8260A	BS	CHLOROBENZENE	96	75	125
9711254	VA971124-1LCS	SW8260A	BS	CHLOROETHANE	99	65	125
9711254	VA971124-1LCS	SW8260A	BS	CHLOROFORM	97	74	125
9711254	VA971124-1LCS	SW8260A	BS	CHLOROMETHANE	92	75	125
9711254	VA971124-1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	101	75	125
9711254	VA971124-1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	102	74	125
9711254	VA971124-1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	98	73	125
9711254	VA971124-1LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	107	75	125
9711254	VA971124-1LCS	SW8260A	BS	DIBROMOMETHANE	111	69	127
9711254	VA971124-1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	108	75	125
9711254	VA971124-1LCS	SW8260A	BS	ETHYL BENZENE	99	75	125
9711254	VA971124-1LCS	SW8260A	BS	HEXACHLOROBUTADIENE	97	75	125
9711254	VA971124-1LCS	SW8260A	BS	ISOPROPYL BENZENE	94	75	125
9711254	VA971124-1LCS	SW8260A	BS	M,P,XYLENE	99	75	125
9711254	VA971124-1LCS	SW8260A	BS	METHYLENE CHLORIDE	51	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery			Lower Limit	Upper Limit
9711254	VA971124-1LCS	SW8260A	BS	N-BUTYLBENZENE	87	75	75	125	
9711254	VA971124-1LCS	SW8260A	BS	N-PROPYLBENZENE	93	75	75	125	
9711254	VA971124-1LCS	SW8260A	BS	NAPHTHALENE	72	75	75	125	
9711254	VA971124-1LCS	SW8260A	BS	OXYLENE	100	75	75	125	
9711254	VA971124-1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	88	75	75	125	
9711254	VA971124-1LCS	SW8260A	BS	SEC-BUTYL BENZENE	96	75	75	125	
9711254	VA971124-1LCS	SW8260A	BS	STYRENE	102	75	75	125	
9711254	VA971124-1LCS	SW8260A	BS	TERT-BUTYL BENZENE	88	75	75	125	
9711254	VA971124-1LCS	SW8260A	BS	TETRACHLOROETHENE	94	71	71	125	
9711254	VA971124-1LCS	SW8260A	BS	TOLUENE	100	74	74	125	
9711254	VA971124-1LCS	SW8260A	BS	TOLUENE-D8	103	75	75	125	
9711254	VA971124-1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	96	75	75	125	
9711254	VA971124-1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	109	66	66	125	
9711254	VA971124-1LCS	SW8260A	BS	TRICHLOROETHENE	99	71	71	125	
9711254	VA971124-1LCS	SW8260A	BS	TRICHLOROFLUOROMETHANE	109	67	67	125	
9711254	VA971124-1LCS	SW8260A	BS	VINYL CHLORIDE	104	46	46	134	
9711262	9711262-3MSD	SW8260A	SD	1,1,1,2-TETRACHLOROETHANE	95				
9711262	9711262-3MSD	SW8260A	SD	1,1,1-TRICHLOROETHANE	99				
9711262	9711262-3MSD	SW8260A	SD	1,1,2,2-TETRACHLOROETHANE	67				
9711262	9711262-3MSD	SW8260A	SD	1,1,2-TRICHLOROETHANE	100				

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9711262	9711262-3MSD	SW8260A	SD	1,1-DICHLOROETHANE	103		
9711262	9711262-3MSD	SW8260A	SD	1,1-DICHLOROETHENE	109		
9711262	9711262-3MSD	SW8260A	SD	1,1-DICHLOROPROPENE	103		
9711262	9711262-3MSD	SW8260A	SD	1,2,3-TRICHLOROBENZENE	85		
9711262	9711262-3MSD	SW8260A	SD	1,2,3-TRICHLOROPROPANE	106		
9711262	9711262-3MSD	SW8260A	SD	1,2,4-TRICHLOROBENZENE	85		
9711262	9711262-3MSD	SW8260A	SD	1,2,4-TRIMETHYLBENZENE	101		
9711262	9711262-3MSD	SW8260A	SD	1,2-DIBROMO-3-CHLOROPROPANE	58		
9711262	9711262-3MSD	SW8260A	SD	1,2-DIBROMOETHANE	97		
9711262	9711262-3MSD	SW8260A	SD	1,2-DICHLOROBENZENE	98		
9711262	9711262-3MSD	SW8260A	SD	1,2-DICHLOROETHANE	93		
9711262	9711262-3MSD	SW8260A	SD	1,2-DICHLOROPROPANE	93		
9711262	9711262-3MSD	SW8260A	SD	1,3,5-TRIMETHYLBENZENE	103		
9711262	9711262-3MSD	SW8260A	SD	1,3-DICHLOROBENZENE	99		
9711262	9711262-3MSD	SW8260A	SD	1,3-DICHLOROPROPANE	101		
9711262	9711262-3MSD	SW8260A	SD	1,4-DICHLOROBENZENE	98		
9711262	9711262-3MSD	SW8260A	SD	2,2-DICHLOROPROPANE	97		
9711262	9711262-3MSD	SW8260A	SD	2-CHLOROTOLUENE	100		
9711262	9711262-3MSD	SW8260A	SD	4-BROMOFLUOROBENZENE	103		

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9711262	9711262-3MSD	SW8260A	SD	4-CHLOROTOLUENE	101		
9711262	9711262-3MSD	SW8260A	SD	BENZENE	94		
9711262	9711262-3MSD	SW8260A	SD	BROMOBENZENE	103		
9711262	9711262-3MSD	SW8260A	SD	BROMOCHLOROMETHANE	94		
9711262	9711262-3MSD	SW8260A	SD	BROMODICHLOROMETHANE	97		
9711262	9711262-3MSD	SW8260A	SD	BROMOFORM	95		
9711262	9711262-3MSD	SW8260A	SD	BROMOMETHANE	93		
9711262	9711262-3MSD	SW8260A	SD	CARBON TETRACHLORIDE	101		
9711262	9711262-3MSD	SW8260A	SD	CHLOROBENZENE	102		
9711262	9711262-3MSD	SW8260A	SD	CHLOROETHANE	111		
9711262	9711262-3MSD	SW8260A	SD	CHLOROFORM	99		
9711262	9711262-3MSD	SW8260A	SD	CIS-1,2-DICHLOROETHENE	99		
9711262	9711262-3MSD	SW8260A	SD	CIS-1,3-DICHLOROPROPENE	93		
9711262	9711262-3MSD	SW8260A	SD	DBROMOCHLOROMETHANE	98		
9711262	9711262-3MSD	SW8260A	SD	DIBROMOFLUOROMETHANE	98		
9711262	9711262-3MSD	SW8260A	SD	DIBROMOMETHANE	99		
9711262	9711262-3MSD	SW8260A	SD	DICHLORODIFLUOROMETHANE	100		
9711262	9711262-3MSD	SW8260A	SD	ETHYLBENZENE	103		
9711262	9711262-3MSD	SW8260A	SD	HEXACHLOROBUTADIENE	82		

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9711262	9711262-3MSD	SW8260A	SD	ISOPROPYLBENZENE	107		
9711262	9711262-3MSD	SW8260A	SD	M+P-XYLENE	101		
9711262	9711262-3MSD	SW8260A	SD	METHYLENE CHLORIDE	22		
9711262	9711262-3MSD	SW8260A	SD	N-BUTYLBENZENE	96		
9711262	9711262-3MSD	SW8260A	SD	N-PROPYLBENZENE	103		
9711262	9711262-3MSD	SW8260A	SD	NAPHTHALENE	86		
9711262	9711262-3MSD	SW8260A	SD	O-XYLENE	97		
9711262	9711262-3MSD	SW8260A	SD	P-ISOPROPYL TOLUENE	99		
9711262	9711262-3MSD	SW8260A	SD	SEC-BUTYL BENZENE	105		
9711262	9711262-3MSD	SW8260A	SD	STYRENE	97		
9711262	9711262-3MSD	SW8260A	SD	TERT-BUTYL BENZENE	101		
9711262	9711262-3MSD	SW8260A	SD	TETRACHLOROETHENE	99		
9711262	9711262-3MSD	SW8260A	SD	TOLUENE	93		
9711262	9711262-3MSD	SW8260A	SD	TOLUENE-D8	94		
9711262	9711262-3MSD	SW8260A	SD	TRANS-1,2-DICHLOROETHENE	101		
9711262	9711262-3MSD	SW8260A	SD	TRANS-1,3-DICHLOROPROPENE	90		
9711262	9711262-3MSD	SW8260A	SD	TRICHLOROFUROMETHANE	124		
9711262	9711262-3MSD	SW8260A	SD	VINYL CHLORIDE	106		
9711262	9711262-3MSD	SW8260A	SD	VINYL CHLORIDE	104		
9711262	VB971125-1LCS	SW8260A	BS	1,1,2-TETRACHLOROETHANE	91	62	108

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9711262	VB971125-1LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	97	65	135
9711262	VB971125-1LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	105	64	135
9711262	VB971125-1LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	102	65	135
9711262	VB971125-1LCS	SW8260A	BS	1,1-DICHLOROETHANE	103	62	135
9711262	VB971125-1LCS	SW8260A	BS	1,1-DICHLOROETHENE	103	65	135
9711262	VB971125-1LCS	SW8260A	BS	1,1-DICHLOROPROPENE	102	65	135
9711262	VB971125-1LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	100	65	147
9711262	VB971125-1LCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	98	65	135
9711262	VB971125-1LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	97	65	145
9711262	VB971125-1LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	105	65	135
9711262	VB971125-1LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROpane	98	49	135
9711262	VB971125-1LCS	SW8260A	BS	1,2-DIBROMOETHANE	96	65	135
9711262	VB971125-1LCS	SW8260A	BS	1,2-DICHLOROBENZENE	105	65	135
9711262	VB971125-1LCS	SW8260A	BS	1,2-DICHLOROETHANE	95	58	137
9711262	VB971125-1LCS	SW8260A	BS	1,2-DICHLOROPROPANE	102	60	135
9711262	VB971125-1LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	106	62	135
9711262	VB971125-1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	105	65	135
9711262	VB971125-1LCS	SW8260A	BS	1,3-DICHLOROPROPANE	95	65	135
9711262	VB971125-1LCS	SW8260A	BS	1,4-DICHLOROBENZENE	105	65	135
9711262	VB971125-1LCS	SW8260A	BS	1-CHLOROHEXANE	97	65	135

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	LowerLimit	Upper Limit
9711262	VB971125-1LCS	SW8260A	BS	2,2-DICHLOROPROpane	103	65	135
9711262	VB971125-1LCS	SW8260A	BS	2-CHLOROTOLUENE	106	63	135
9711262	VB971125-1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	100	65	135
9711262	VB971125-1LCS	SW8260A	BS	4-CHLOROTOLUENE	105	64	135
9711262	VB971125-1LCS	SW8260A	BS	BENZENE	101	65	135
9711262	VB971125-1LCS	SW8260A	BS	BROMOBENZENE	101	65	135
9711262	VB971125-1LCS	SW8260A	BS	BROMOCHLOROMETHANE	101	63	135
9711262	VB971125-1LCS	SW8260A	BS	BROMODICHLOROMETHANE	97	65	135
9711262	VB971125-1LCS	SW8260A	BS	BROMOFORM	92	65	135
9711262	VB971125-1LCS	SW8260A	BS	BROMOMETHANE	100	62	135
9711262	VB971125-1LCS	SW8260A	BS	CARBON TETRACHLORIDE	100	52	135
9711262	VB971125-1LCS	SW8260A	BS	CHLOROBENZENE	102	65	135
9711262	VB971125-1LCS	SW8260A	BS	CHLOROETHANE	126	55	135
9711262	VB971125-1LCS	SW8260A	BS	CHLOROFORM	102	64	135
9711262	VB971125-1LCS	SW8260A	BS	CHLOROMETHANE	100	65	135
9711262	VB971125-1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	106	65	135
9711262	VB971125-1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	101	64	135
9711262	VB971125-1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	91	63	135
9711262	VB971125-1LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	102	65	135
9711262	VB971125-1LCS	SW8260A	BS	DIBROMOMETHANE	99	59	137

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>LowerLimit</u>	<u>Upper Limit</u>
9711262	VB971125-1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	103	65	135
9711262	VB971125-1LCS	SW8260A	BS	ETHYLBENZENE	99	65	135
9711262	VB971125-1LCS	SW8260A	BS	HEXACHLOROBUTADIENE	100	65	135
9711262	VB971125-1LCS	SW8260A	BS	ISOPROPYLBENZENE	109	65	135
9711262	VB971125-1LCS	SW8260A	BS	Mp-XYLENE	100	65	135
9711262	VB971125-1LCS	SW8260A	BS	METHYLENE CHLORIDE	31	65	135
9711262	VB971125-1LCS	SW8260A	BS	N-BUTYLBENZENE	104	65	135
9711262	VB971125-1LCS	SW8260A	BS	N-PROPYLBENZENE	109	65	135
9711262	VB971125-1LCS	SW8260A	BS	NAPHTHALENE	101	65	135
9711262	VB971125-1LCS	SW8260A	BS	O-XYLENE	97	65	135
9711262	VB971125-1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	102	65	135
9711262	VB971125-1LCS	SW8260A	BS	SEC-BUTYL BENZENE	109	65	135
9711262	VB971125-1LCS	SW8260A	BS	STYRENE	97	65	135
9711262	VB971125-1LCS	SW8260A	BS	TERT-BUTYL BENZENE	104	65	135
9711262	VB971125-1LCS	SW8260A	BS	TETRACHLOROETHENE	91	61	135
9711262	VB971125-1LCS	SW8260A	BS	TOLUENE	98	64	135
9711262	VB971125-1LCS	SW8260A	BS	TOLUENE-D8	98	65	135
9711262	VB971125-1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	102	65	135
9711262	VB971125-1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	95	56	135
9711262	VB971125-1LCS	SW8260A	BS	TRICHLOROETHENE	102	61	135

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9711262	VB971125-1LCS	SW8260A	BS	TRICHLOROFLUOROMETHANE	105	57	135
9711262	VB971125-1LCS	SW8260A	BS	VINYL CHLORIDE	110	36	144
9711302	VA971203-1LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	102	72	125
9711302	VA971203-1LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	97	75	125
9711302	VA971203-1LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	82	74	125
9711302	VA971203-1LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	100	75	127
9711302	VA971203-1LCS	SW8260A	BS	1,1-DICHLOROETHANE	95	72	125
9711302	VA971203-1LCS	SW8260A	BS	1,1-DICHLOROETHENE	97	75	125
9711302	VA971203-1LCS	SW8260A	BS	1,1-DICHLOROPROPENE	95	75	125
9711302	VA971203-1LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	87	75	137
9711302	VA971203-1LCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	95	75	125
9711302	VA971203-1LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	92	75	135
9711302	VA971203-1LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	87	75	125
9711302	VA971203-1LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROPANE	95	59	125
9711302	VA971203-1LCS	SW8260A	BS	1,2-DIBROMOETHANE	106	75	125
9711302	VA971203-1LCS	SW8260A	BS	1,2-DICHLOROBENZENE	93	75	125
9711302	VA971203-1LCS	SW8260A	BS	1,2-DICHLOROETHANE	99	68	127
9711302	VA971203-1LCS	SW8260A	BS	1,2-DICHLOROPROPANE	94	70	125
9711302	VA971203-1LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	90	72	112
9711302	VA971203-1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	89	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery			Lower Limit	Upper Limit
9711302	VA971203-1LCS	SW8260A	BS	1,3-DICHLOROPROPANE	101	75	75	125	125
9711302	VA971203-1LCS	SW8260A	BS	1,4-DICHLOROBENZENE	90	75	75	125	125
9711302	VA971203-1LCS	SW8260A	BS	1-CHLOROHEXANE	98	75	75	125	125
9711302	VA971203-1LCS	SW8260A	BS	2,2-DICHLOROPROPANE	89	75	75	125	125
9711302	VA971203-1LCS	SW8260A	BS	2-CHLOROTOLUENE	90	73	73	125	125
9711302	VA971203-1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	101	75	75	125	125
9711302	VA971203-1LCS	SW8260A	BS	4-CHLOROTOLUENE	88	74	74	125	125
9711302	VA971203-1LCS	SW8260A	BS	BENZENE	90	75	75	125	125
9711302	VA971203-1LCS	SW8260A	BS	BROMOBENZENE	93	75	75	125	125
9711302	VA971203-1LCS	SW8260A	BS	BROMOCHLOROMETHANE	95	73	73	125	125
9711302	VA971203-1LCS	SW8260A	BS	BROMODICHLOROMETHANE	100	75	75	125	125
9711302	VA971203-1LCS	SW8260A	BS	BROMOFORM	102	75	75	125	125
9711302	VA971203-1LCS	SW8260A	BS	BROMOMETHANE	94	72	72	125	125
9711302	VA971203-1LCS	SW8260A	BS	CARBON TETRACHLORIDE	95	62	62	125	125
9711302	VA971203-1LCS	SW8260A	BS	CHLOROBENZENE	100	75	75	125	125
9711302	VA971203-1LCS	SW8260A	BS	CHLOROETHANE	97	65	65	125	125
9711302	VA971203-1LCS	SW8260A	BS	CHLOROFORM	93	74	74	125	125
9711302	VA971203-1LCS	SW8260A	BS	CHLORMETHANE	94	75	75	125	125
9711302	VA971203-1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	94	75	75	125	125
9711302	VA971203-1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	95	74	74	125	125

SDG	LabsampleID	Method	QC Type	Analyte	% Recovery	Lower Limit	Upper Limit
9711302	VA971203-1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	104	73	125
9711302	VA971203-1LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	102	75	125
9711302	VA971203-1LCS	SW8260A	BS	DIBROMOMETHANE	105	69	127
9711302	VA971203-1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	93	75	125
9711302	VA971203-1LCS	SW8260A	BS	ETHYL BENZENE	98	75	125
9711302	VA971203-1LCS	SW8260A	BS	HEXA CHLOROBUTADIENE	92	75	125
9711302	VA971203-1LCS	SW8260A	BS	ISOPROPYL BENZENE	92	75	125
9711302	VA971203-1LCS	SW8260A	BS	M,P-XYLENE	102	75	125
9711302	VA971203-1LCS	SW8260A	BS	METHYLENE CHLORIDE	73	75	125
9711302	VA971203-1LCS	SW8260A	BS	N-BUTYL BENZENE	96	75	125
9711302	VA971203-1LCS	SW8260A	BS	N-PROPYL BENZENE	91	75	125
9711302	VA971203-1LCS	SW8260A	BS	NAPHTHALENE	83	75	125
9711302	VA971203-1LCS	SW8260A	BS	O-XYLENE	99	75	125
9711302	VA971203-1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	90	75	125
9711302	VA971203-1LCS	SW8260A	BS	SEC-BUTYL BENZENE	90	75	125
9711302	VA971203-1LCS	SW8260A	BS	STYRENE	98	75	125
9711302	VA971203-1LCS	SW8260A	BS	TERT-BUTYL BENZENE	88	75	125
9711302	VA971203-1LCS	SW8260A	BS	TETRACHLOROETHENE	99	71	125
9711302	VA971203-1LCS	SW8260A	BS	TOLUENE	90	74	125
9711302	VA971203-1LCS	SW8260A	BS	TOLUENE-D8	100	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	LowerLimit	Upper Limit
9711302	VA971203-1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	96	75	125
9711302	VA971203-1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	100	66	125
9711302	VA971203-1LCS	SW8260A	BS	TRICHLOROETHENE	103	71	125
9711302	VA971203-1LCS	SW8260A	BS	TRICHLOROFLUOROMETHANE	94	67	125
9711302	VA971203-1LCS	SW8260A	BS	VINYL CHLORIDE	96	46	134
9711302	VB971205-1LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	88	62	108
9711302	VB971205-1LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	98	65	135
9711302	VB971205-1LCS	SW8260A	BS	1,1,2-TETRACHLOROETHANE	90	64	135
9711302	VB971205-1LCS	SW8260A	BS	1,1,2,2-TRICHLOROETHANE	92	65	135
9711302	VB971205-1LCS	SW8260A	BS	1,1-DICHLOROETHANE	98	62	135
9711302	VB971205-1LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	100	65	135
9711302	VB971205-1LCS	SW8260A	BS	1,1-DICHLOROPROPENE	89	65	135
9711302	VB971205-1LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	95	65	147
9711302	VB971205-1LCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	85	65	135
9711302	VB971205-1LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	97	65	145
9711302	VB971205-1LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	93	65	135
9711302	VB971205-1LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROPROPANE	78	49	135
9711302	VB971205-1LCS	SW8260A	BS	1,2-DIBROMOETHANE	90	65	135
9711302	VB971205-1LCS	SW8260A	BS	1,2-DICHLOROBENZENE	88	65	135
9711302	VB971205-1LCS	SW8260A	BS	1,2-DICHLOROETHANE	84	58	137

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>% Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9711302	VB971205-1LCS	SW8260A	BS	1,2-DICHLOROPROPANE	91	60	135
9711302	VB971205-1LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	91	62	135
9711302	VB971205-1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	90	65	135
9711302	VB971205-1LCS	SW8260A	BS	1,3-DICHLOROPROPANE	85	65	135
9711302	VB971205-1LCS	SW8260A	BS	1,4-DICHLOROBENZENE	89	65	135
9711302	VB971205-1LCS	SW8260A	BS	1-CHLOROHEXANE	90	65	135
9711302	VB971205-1LCS	SW8260A	BS	2,2-DICHLOROPROPANE	92	65	135
9711302	VB971205-1LCS	SW8260A	BS	2-CHLOROTOLUENE	90	63	135
9711302	VB971205-1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	101	65	135
9711302	VB971205-1LCS	SW8260A	BS	4-CHLOROTOLUENE	87	64	135
9711302	VB971205-1LCS	SW8260A	BS	BENZENE	87	65	135
9711302	VB971205-1LCS	SW8260A	BS	BROMOBENZENE	89	65	135
9711302	VB971205-1LCS	SW8260A	BS	BROMOCHLOROMETHANE	95	63	135
9711302	VB971205-1LCS	SW8260A	BS	BROMODICHLOROMETHANE	84	65	135
9711302	VB971205-1LCS	SW8260A	BS	BROMOFORM	80	65	135
9711302	VB971205-1LCS	SW8260A	BS	BROMOMETHANE	114	62	135
9711302	VB971205-1LCS	SW8260A	BS	CARBON TETRACHLORIDE	89	52	135
9711302	VB971205-1LCS	SW8260A	BS	CHLOROBENZENE	89	65	135
9711302	VB971205-1LCS	SW8260A	BS	CHLOROETHANE	138	55	135
9711302	VB971205-1LCS	SW8260A	BS	CHLOROFORM	98	64	135

SDG	LabSampleID	Method	QC Type	Analyte	% Recovery	Lower Limit	Upper Limit
9711302	VB971205-1LCS	SW8260A	BS	CHLOROMETHANE	130	65	135
9711302	VB971205-1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	97	65	135
9711302	VB971205-1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	95	64	135
9711302	VB971205-1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	85	63	135
9711302	VB971205-1LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	106	65	135
9711302	VB971205-1LCS	SW8260A	BS	DIBROMOMETHANE	87	59	137
9711302	VB971205-1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	131	65	135
9711302	VB971205-1LCS	SW8260A	BS	ETHYLBENZENE	88	65	135
9711302	VB971205-1LCS	SW8260A	BS	HEXACHLOROBUTADIENE	86	65	135
9711302	VB971205-1LCS	SW8260A	BS	ISOPROPYLBENZENE	88	65	135
9711302	VB971205-1LCS	SW8260A	BS	M,P-XYLENE	90	65	135
9711302	VB971205-1LCS	SW8260A	BS	METHYLENE CHLORIDE	68	65	135
9711302	VB971205-1LCS	SW8260A	BS	N-BUTYLBENZENE	94	65	135
9711302	VB971205-1LCS	SW8260A	BS	N-PROPYLBENZENE	89	65	135
9711302	VB971205-1LCS	SW8260A	BS	NAPHTHALENE	111	65	135
9711302	VB971205-1LCS	SW8260A	BS	O-XYLENE	91	65	135
9711302	VB971205-1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	92	65	135
9711302	VB971205-1LCS	SW8260A	BS	SEC-BUTYL BENZENE	92	65	135
9711302	VB971205-1LCS	SW8260A	BS	STYRENE	94	65	135
9711302	VB971205-1LCS	SW8260A	BS	TERT-BUTYL BENZENE	96	65	135

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9711302	VB971205-1LCS	SW8260A	BS	TETRACHLOROETHENE	87	61	135
9711302	VB971205-1LCS	SW8260A	BS	TOLUENE	87	64	135
9711302	VB971205-1LCS	SW8260A	BS	TOLUENE-D8	94	65	135
9711302	VB971205-1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	97	65	135
9711302	VB971205-1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	90	56	135
9711302	VB971205-1LCS	SW8260A	BS	TRICHLOROETHENE	89	61	135
9711302	VB971205-1LCS	SW8260A	BS	TRICHLOROFLUOROMETHANE	112	57	135
9711302	VB971205-1LCS	SW8260A	BS	VINYL CHLORIDE	132	36	144
9711317	VA971203-1LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	102	72	125
9711317	VA971203-1LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	97	75	125
9711317	VA971203-1LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	82	74	125
9711317	VA971203-1LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	100	75	127
9711317	VA971203-1LCS	SW8260A	BS	1,1-DICHLOROETHANE	95	72	125
9711317	VA971203-1LCS	SW8260A	BS	1,1,1-DICHLOROETHANE	97	75	125
9711317	VA971203-1LCS	SW8260A	BS	1,1,1,1-TRICHLOROETHANE	95	75	125
9711317	VA971203-1LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	87	75	137
9711317	VA971203-1LCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	95	75	125
9711317	VA971203-1LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	92	75	135
9711317	VA971203-1LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	87	75	125
9711317	VA971203-1LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROPANE	95	59	125

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>LowerLimit</u>	<u>Upper Limit</u>
9711317	VA971203-1LCS	SW8260A	BS	1,2-DIBROMOETHANE	106	75	125
9711317	VA971203-1LCS	SW8260A	BS	1,2-DICHLOROBENZENE	93	75	125
9711317	VA971203-1LCS	SW8260A	BS	1,2-DICHLOROETHANE	99	68	127
9711317	VA971203-1LCS	SW8260A	BS	1,2-DICHLOROPROpane	94	70	125
9711317	VA971203-1LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	90	72	112
9711317	VA971203-1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	89	75	125
9711317	VA971203-1LCS	SW8260A	BS	1,3-DICHLOROPROpane	101	75	125
9711317	VA971203-1LCS	SW8260A	BS	1,4-DICHLOROBENZENE	90	75	125
9711317	VA971203-1LCS	SW8260A	BS	1-CHLOROHEXANE	98	75	125
9711317	VA971203-1LCS	SW8260A	BS	2,2-DICHLOROPROpane	89	75	125
9711317	VA971203-1LCS	SW8260A	BS	2-CHLOROTOLUENE	90	73	125
9711317	VA971203-1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	101	75	125
9711317	VA971203-1LCS	SW8260A	BS	4-CHLOROTOLUENE	88	74	125
9711317	VA971203-1LCS	SW8260A	BS	BENZENE	90	75	125
9711317	VA971203-1LCS	SW8260A	BS	BROMOBENZENE	93	75	125
9711317	VA971203-1LCS	SW8260A	BS	BROMOCHLOROMETHANE	95	73	125
9711317	VA971203-1LCS	SW8260A	BS	BROMODICHLOROMETHANE	100	75	125
9711317	VA971203-1LCS	SW8260A	BS	BROMOFORM	102	75	125
9711317	VA971203-1LCS	SW8260A	BS	BROMOMETHANE	94	72	125
9711317	VA971203-1LCS	SW8260A	BS	CARBON TETRACHLORIDE	95	62	125

SDG	LabSampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9711317	VA971203-1LCS	SW8260A	BS	CHLOROBENZENE	100	75	125
9711317	VA971203-1LCS	SW8260A	BS	CHLOROETHANE	97	65	125
9711317	VA971203-1LCS	SW8260A	BS	CHLOROFORM	93	74	125
9711317	VA971203-1LCS	SW8260A	BS	CHLORMETHANE	94	75	125
9711317	VA971203-1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	94	75	125
9711317	VA971203-1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	95	74	125
9711317	VA971203-1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	104	73	125
9711317	VA971203-1LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	102	75	125
9711317	VA971203-1LCS	SW8260A	BS	DIBROMOMETHANE	105	69	127
9711317	VA971203-1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	93	75	125
9711317	VA971203-1LCS	SW8260A	BS	ETHYLBENZENE	98	75	125
9711317	VA971203-1LCS	SW8260A	BS	HEXACHLOROBUTADIENE	92	75	125
9711317	VA971203-1LCS	SW8260A	BS	ISOPROPYLBENZENE	92	75	125
9711317	VA971203-1LCS	SW8260A	BS	M,P-XYLENE	102	75	125
9711317	VA971203-1LCS	SW8260A	BS	METHYLENE CHLORIDE	73	75	125
9711317	VA971203-1LCS	SW8260A	BS	N-BUTYLBENZENE	96	75	125
9711317	VA971203-1LCS	SW8260A	BS	N-PROPYLBENZENE	91	75	125
9711317	VA971203-1LCS	SW8260A	BS	NAPHTHALENE	83	75	125
9711317	VA971203-1LCS	SW8260A	BS	O-XYLENE	99	75	125
9711317	VA971203-1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	90	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9711317	VA971203-1LCS	SW8260A	BS	SEC-BUTYL BENZENE	90	75	125
9711317	VA971203-1LCS	SW8260A	BS	STYRENE	98	75	125
9711317	VA971203-1LCS	SW8260A	BS	TERT-BUTYL BENZENE	88	75	125
9711317	VA971203-1LCS	SW8260A	BS	TETRACHLOROETHENE	99	71	125
9711317	VA971203-1LCS	SW8260A	BS	TOLUENE	90	74	125
9711317	VA971203-1LCS	SW8260A	BS	TOLUENE-D8	100	75	125
9711317	VA971203-1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	96	75	125
9711317	VA971203-1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	100	66	125
9711317	VA971203-1LCS	SW8260A	BS	TRICHLOROETHENE	103	71	125
9711317	VA971203-1LCS	SW8260A	BS	TRICHLOROFUOROMETHANE	94	67	125
9711317	VA971203-1LCS	SW8260A	BS	VINYL CHLORIDE	96	46	134
9711317	VB971205-1LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	88	62	108
9711317	VB971205-1LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	98	65	135
9711317	VB971205-1LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	90	64	135
9711317	VB971205-1LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	92	65	135
9711317	VB971205-1LCS	SW8260A	BS	1,1-DICHLOROETHANE	98	62	135
9711317	VB971205-1LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	95	65	147
9711317	VB971205-1LCS	SW8260A	BS	1,2,3-TRICHLOROPROpane	85	65	135

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9711317	VB971205-1LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	97	65	145
9711317	VB971205-1LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	93	65	135
9711317	VB971205-1LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROpane	78	49	135
9711317	VB971205-1LCS	SW8260A	BS	1,2-DIBROMOETHANE	90	65	135
9711317	VB971205-1LCS	SW8260A	BS	1,2-DICHLOROBENZENE	88	65	135
9711317	VB971205-1LCS	SW8260A	BS	1,2-DICHLOROETHANE	84	58	137
9711317	VB971205-1LCS	SW8260A	BS	1,2-DICHLOROPROPANE	91	60	135
9711317	VB971205-1LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	91	62	135
9711317	VB971205-1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	90	65	135
9711317	VB971205-1LCS	SW8260A	BS	1,3-DICHLOROPROPANE	85	65	135
9711317	VB971205-1LCS	SW8260A	BS	1,4-DICHLOROBENZENE	89	65	135
9711317	VB971205-1LCS	SW8260A	BS	1-CHLOROHEXANE	90	65	135
9711317	VB971205-1LCS	SW8260A	BS	2,2-DICHLOROPROPANE	92	65	135
9711317	VB971205-1LCS	SW8260A	BS	2-CHLOROTOLUENE	90	63	135
9711317	VB971205-1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	101	65	135
9711317	VB971205-1LCS	SW8260A	BS	4-CHLOROTOLUENE	87	64	135
9711317	VB971205-1LCS	SW8260A	BS	BENZENE	87	65	135
9711317	VB971205-1LCS	SW8260A	BS	BROMOBENZENE	89	65	135
9711317	VB971205-1LCS	SW8260A	BS	BROMOCHLOROMETHANE	95	63	135
9711317	VB971205-1LCS	SW8260A	BS	BROMODICHLOROMETHANE	84	65	135

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	LowerLimit	Upper Limit
9711317	VB971205-1LCS	SW8260A	BS	BROMOFORM	80	65	135
9711317	VB971205-1LCS	SW8260A	BS	BROMOMETHANE	114	62	135
9711317	VB971205-1LCS	SW8260A	BS	CARBON TETRACHLORIDE	89	52	135
9711317	VB971205-1LCS	SW8260A	BS	CHLOROBENZENE	89	65	135
9711317	VB971205-1LCS	SW8260A	BS	CHLOROETHANE	138	55	135
9711317	VB971205-1LCS	SW8260A	BS	CHLOROFORM	98	64	135
9711317	VB971205-1LCS	SW8260A	BS	CHLORMETHANE	130	65	135
9711317	VB971205-1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	97	65	135
9711317	VB971205-1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	95	64	135
9711317	VB971205-1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	85	63	135
9711317	VB971205-1LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	106	65	135
9711317	VB971205-1LCS	SW8260A	BS	DIBROMOMETHANE	87	59	137
9711317	VB971205-1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	131	65	135
9711317	VB971205-1LCS	SW8260A	BS	ETHYLBENZENE	88	65	135
9711317	VB971205-1LCS	SW8260A	BS	HEXACHLOROBUTADIENE	86	65	135
9711317	VB971205-1LCS	SW8260A	BS	ISOPROPYLBENZENE	88	65	135
9711317	VB971205-1LCS	SW8260A	BS	M,P-XYLENE	90	65	135
9711317	VB971205-1LCS	SW8260A	BS	METHYLENE CHLORIDE	68	65	135
9711317	VB971205-1LCS	SW8260A	BS	N-BUTYLBENZENE	94	65	135
9711317	VB971205-1LCS	SW8260A	BS	N-PROPYLBENZENE	89	65	135

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>		<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9711317	VB971205-1LCS	SW8260A	BS	NAPHTHALENE		111	65	135
9711317	VB971205-1LCS	SW8260A	BS	O-XYLENE		91	65	135
9711317	VB971205-1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE		92	65	135
9711317	VB971205-1LCS	SW8260A	BS	SEC-BUTYL BENZENE		92	65	135
9711317	VB971205-1LCS	SW8260A	BS	STYRENE		94	65	135
9711317	VB971205-1LCS	SW8260A	BS	TERT-BUTYL BENZENE		96	65	135
9711317	VB971205-1LCS	SW8260A	BS	TETRACHLOROETHENE		87	61	135
9711317	VB971205-1LCS	SW8260A	BS	TOLUENE		87	64	135
9711317	VB971205-1LCS	SW8260A	BS	TOLUENE-D8		94	65	135
9711317	VB971205-1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE		97	65	135
9711317	VB971205-1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE		90	56	135
9711317	VB971205-1LCS	SW8260A	BS	TRICHLOROETHENE		89	61	135
9711317	VB971205-1LCS	SW8260A	BS	TRICHLOROFUOROMETHANE		112	57	135
9711317	VB971205-1LCS	SW8260A	BS	VINYL CHLORIDE		132	36	144
9712023	VB971211-aLCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE		85	62	108
9712023	VB971211-aLCS	SW8260A	BS	1,1,1-TRICHLOROETHANE		100	65	135
9712023	VB971211-aLCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE		103	64	135
9712023	VB971211-aLCS	SW8260A	BS	1,1,2-TRICHLOROETHANE		103	65	135
9712023	VB971211-aLCS	SW8260A	BS	1,1-DICHLOROETHANE		101	62	135
9712023	VB971211-aLCS	SW8260A	BS	1,1-DICHLOROETHENE		103	65	135

SDG	LabSampleID	Method	QC Type	Analyte	% Recovery	Lower Limit	Upper Limit
9712023	VB971211-allCS	SW8260A	BS	1,1-DICHLOROPROPENE	100	65	135
9712023	VB971211-allCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	88	65	147
9712023	VB971211-allCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	100	65	135
9712023	VB971211-allCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	88	65	145
9712023	VB971211-allCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	95	65	135
9712023	VB971211-allCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROPANE	107	49	135
9712023	VB971211-allCS	SW8260A	BS	1,2-DIBROMOETHANE	87	65	135
9712023	VB971211-allCS	SW8260A	BS	1,2-DICHLOROBENZENE	95	65	135
9712023	VB971211-allCS	SW8260A	BS	1,2-DICHLOROETHANE	116	58	137
9712023	VB971211-allCS	SW8260A	BS	1,2-DICHLOROPROPANE	105	60	135
9712023	VB971211-allCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	98	62	135
9712023	VB971211-allCS	SW8260A	BS	1,3-DICHLOROBENZENE	94	65	135
9712023	VB971211-allCS	SW8260A	BS	1,3-DICHLOROPROPANE	90	65	135
9712023	VB971211-allCS	SW8260A	BS	1,4-DICHLOROBENZENE	93	65	135
9712023	VB971211-allCS	SW8260A	BS	1-CHLOROHEXANE	86	65	135
9712023	VB971211-allCS	SW8260A	BS	2,2-DICHLOROPROPANE	103	65	135
9712023	VB971211-allCS	SW8260A	BS	2-CHLOROTOLUENE	89	63	135
9712023	VB971211-allCS	SW8260A	BS	4-BROMOFLUOROBENZENE	108	65	135
9712023	VB971211-allCS	SW8260A	BS	4-CHLOROTOLUENE	70	64	135
9712023	VB971211-allCS	SW8260A	BS	BENZENE	99	65	135

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9712023	VB971211-a1LCS	SW8260A	BS	BROMOBENZENE	94	65	135
9712023	VB971211-a1LCS	SW8260A	BS	BROMOCHLOROMETHANE	109	63	135
9712023	VB971211-a1LCS	SW8260A	BS	BROMODICHLOROMETHANE	106	65	135
9712023	VB971211-a1LCS	SW8260A	BS	BROMOFORM	87	65	135
9712023	VB971211-a1LCS	SW8260A	BS	BROMOMETHANE	100	62	135
9712023	VB971211-a1LCS	SW8260A	BS	CARBON TETRACHLORIDE	101	52	135
9712023	VB971211-a1LCS	SW8260A	BS	CHLOROBENZENE	88	65	135
9712023	VB971211-a1LCS	SW8260A	BS	CHLOROETHANE	114	55	135
9712023	VB971211-a1LCS	SW8260A	BS	CHLOROFORM	100	64	135
9712023	VB971211-a1LCS	SW8260A	BS	CHLORMETHANE	99	65	135
9712023	VB971211-a1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	101	65	135
9712023	VB971211-a1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	97	64	135
9712023	VB971211-a1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	84	63	135
9712023	VB971211-a1LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	107	65	135
9712023	VB971211-a1LCS	SW8260A	BS	DIBROMOMETHANE	104	59	137
9712023	VB971211-a1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	52	65	135
9712023	VB971211-a1LCS	SW8260A	BS	ETHYL BENZENE	87	65	135
9712023	VB971211-a1LCS	SW8260A	BS	HEXACHLOROBUTADIENE	88	65	135
9712023	VB971211-a1LCS	SW8260A	BS	ISOPROPYL BENZENE	94	65	135
9712023	VB971211-a1LCS	SW8260A	BS	M,P-XYLENE	90	65	135

SDG	LabSampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9712023	VB971211-a1LCS	SW8260A	BS	METHYLENE CHLORIDE	58	65	135
9712023	VB971211-a1LCS	SW8260A	BS	N-BUTYLBENZENE	95	65	135
9712023	VB971211-a1LCS	SW8260A	BS	N-PROPYLBENZENE	98	65	135
9712023	VB971211-a1LCS	SW8260A	BS	NAPHTHALENE	79	65	135
9712023	VB971211-a1LCS	SW8260A	BS	O-XYLENE	88	65	135
9712023	VB971211-a1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	96	65	135
9712023	VB971211-a1LCS	SW8260A	BS	SEC-BUTYL BENZENE	96	65	135
9712023	VB971211-a1LCS	SW8260A	BS	STYRENE	93	65	135
9712023	VB971211-a1LCS	SW8260A	BS	TERT-BUTYL BENZENE	98	65	135
9712023	VB971211-a1LCS	SW8260A	BS	TETRACHLOROETHENE	80	61	135
9712023	VB971211-a1LCS	SW8260A	BS	TOLUENE	94	64	135
9712023	VB971211-a1LCS	SW8260A	BS	TOLUENE-D8	109	65	135
9712023	VB971211-a1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	104	65	135
9712023	VB971211-a1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	104	56	135
9712023	VB971211-a1LCS	SW8260A	BS	TRICHLOROETHENE	101	61	135
9712023	VB971211-a1LCS	SW8260A	BS	TRICHLOROFUOROMETHANE	105	57	135
9712023	VB971211-a1LCS	SW8260A	BS	VINYL CHLORIDE	56	36	144
9712095	VA971211-1LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	101	72	125
9712095	VA971211-1LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	104	75	125
9712095	VA971211-1LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	98	74	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9712095	VA971211-1LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	97	75	127
9712095	VA971211-1LCS	SW8260A	BS	1,1-DICHLOROETHANE	102	72	125
9712095	VA971211-1LCS	SW8260A	BS	1,1-DICHLOROETHENE	104	75	125
9712095	VA971211-1LCS	SW8260A	BS	1,1-DICHLOROPROPENE	103	75	125
9712095	VA971211-1LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	93	75	137
9712095	VA971211-1LCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	101	75	125
9712095	VA971211-1LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	95	75	135
9712095	VA971211-1LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	103	75	125
9712095	VA971211-1LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROPANE	100	59	125
9712095	VA971211-1LCS	SW8260A	BS	1,2-DIBROMOETHANE	101	75	125
9712095	VA971211-1LCS	SW8260A	BS	1,2-DICHLOROBENZENE	103	75	125
9712095	VA971211-1LCS	SW8260A	BS	1,2-DICHLOROETHANE	116	68	127
9712095	VA971211-1LCS	SW8260A	BS	1,2-DICHLOROPROPANE	105	70	125
9712095	VA971211-1LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	101	72	112
9712095	VA971211-1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	95	75	125
9712095	VA971211-1LCS	SW8260A	BS	1,3-DICHLOROPROPANE	102	75	125
9712095	VA971211-1LCS	SW8260A	BS	1-CHLOROHEXANE	102	75	125
9712095	VA971211-1LCS	SW8260A	BS	2,2-DICHLOROPROPANE	109	75	125
9712095	VA971211-1LCS	SW8260A	BS	2-CHLOROTOLUENE	108	73	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9712095	VA971211-1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	100	75	125
9712095	VA971211-1LCS	SW8260A	BS	4-CHLOROTOLUENE	97	74	125
9712095	VA971211-1LCS	SW8260A	BS	BENZENE	105	75	125
9712095	VA971211-1LCS	SW8260A	BS	BROMOBENZENE	89	75	125
9712095	VA971211-1LCS	SW8260A	BS	BROMOCHLOROMETHANE	99	73	125
9712095	VA971211-1LCS	SW8260A	BS	BROMODICHLOROMETHANE	110	75	125
9712095	VA971211-1LCS	SW8260A	BS	BROMOFORM	105	75	125
9712095	VA971211-1LCS	SW8260A	BS	BROMOMETHANE	94	72	125
9712095	VA971211-1LCS	SW8260A	BS	CARBON TETRACHLORIDE	106	62	125
9712095	VA971211-1LCS	SW8260A	BS	CHLOROBENZENE	103	75	125
9712095	VA971211-1LCS	SW8260A	BS	CHLOROETHANE	99	65	125
9712095	VA971211-1LCS	SW8260A	BS	CHLOROFORM	102	74	125
9712095	VA971211-1LCS	SW8260A	BS	CHLOROMETHANE	98	75	125
9712095	VA971211-1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	107	75	125
9712095	VA971211-1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	101	74	125
9712095	VA971211-1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	103	73	125
9712095	VA971211-1LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	95	75	125
9712095	VA971211-1LCS	SW8260A	BS	DIBROMOMETHANE	104	69	127
9712095	VA971211-1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	103	75	125
9712095	VA971211-1LCS	SW8260A	BS	ETHYLBENZENE	102	75	125

SDG	LabSampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9712095	VA971211-1LCS	SW8260A	BS	HEXACHLOROBUTADIENE	101	75	125
9712095	VA971211-1LCS	SW8260A	BS	ISOPROPYLBENZENE	100	75	125
9712095	VA971211-1LCS	SW8260A	BS	M,P-XYLENE	117	75	125
9712095	VA971211-1LCS	SW8260A	BS	METHYLENE CHLORIDE	62	75	125
9712095	VA971211-1LCS	SW8260A	BS	N-BUTYLBENZENE	106	75	125
9712095	VA971211-1LCS	SW8260A	BS	N-PROPYLBENZENE	108	75	125
9712095	VA971211-1LCS	SW8260A	BS	NAPHTHALENE	85	75	125
9712095	VA971211-1LCS	SW8260A	BS	O-XYLENE	106	75	125
9712095	VA971211-1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	100	75	125
9712095	VA971211-1LCS	SW8260A	BS	SEC-BUTYL BENZENE	105	75	125
9712095	VA971211-1LCS	SW8260A	BS	STYRENE	104	75	125
9712095	VA971211-1LCS	SW8260A	BS	TERT-BUTYL BENZENE	100	75	125
9712095	VA971211-1LCS	SW8260A	BS	TETRACHLOROETHENE	101	71	125
9712095	VA971211-1LCS	SW8260A	BS	TOLUENE	106	74	125
9712095	VA971211-1LCS	SW8260A	BS	TOLUENE-D8	105	75	125
9712095	VA971211-1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	102	75	125
9712095	VA971211-1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	101	66	125
9712095	VA971211-1LCS	SW8260A	BS	TRICHLOROETHENE	110	71	125
9712095	VA971211-1LCS	SW8260A	BS	TRICHLOROFLUOROMETHANE	106	67	125
9712095	VA971211-1LCS	SW8260A	BS	VINYL CHLORIDE	104	46	134

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9712095	VB971211-aLCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	85	62	108
9712095	VB971211-aLCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	100	65	135
9712095	VB971211-aLCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	103	64	135
9712095	VB971211-aLCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	103	65	135
9712095	VB971211-aLCS	SW8260A	BS	1,1-DICHLOROETHANE	101	62	135
9712095	VB971211-aLCS	SW8260A	BS	1,1-DICHLOROETHENE	103	65	135
9712095	VB971211-aLCS	SW8260A	BS	1,1-DICHLOROPROPENE	100	65	135
9712095	VB971211-aLCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	88	65	147
9712095	VB971211-aLCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	100	65	135
9712095	VB971211-aLCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	88	65	145
9712095	VB971211-aLCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	95	65	135
9712095	VB971211-aLCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROPANE	107	49	135
9712095	VB971211-aLCS	SW8260A	BS	1,2-DIBROMOETHANE	87	65	135
9712095	VB971211-aLCS	SW8260A	BS	1,2-DICHLOROBENZENE	95	65	135
9712095	VB971211-aLCS	SW8260A	BS	1,2-DICHLOROETHANE	116	58	137
9712095	VB971211-aLCS	SW8260A	BS	1,2-DICHLOROPROPANE	105	60	135
9712095	VB971211-aLCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	98	62	135
9712095	VB971211-aLCS	SW8260A	BS	1,3-DICHLOROBENZENE	94	65	135
9712095	VB971211-aLCS	SW8260A	BS	1,3-DICHLOROPROPANE	90	65	135
9712095	VB971211-aLCS	SW8260A	BS	1,4-DICHLOROBENZENE	93	65	135

SDG	LabSampleID	Method	QC Type	Analyte	% Recovery	Lower Limit	Upper Limit
9712095	VB971211-a1LCS	SW8260A	BS	1-CHLOROHEXANE	86	65	135
9712095	VB971211-a1LCS	SW8260A	BS	2,2-DICHLOROPROPANE	103	65	135
9712095	VB971211-a1LCS	SW8260A	BS	2-CHLOROTOLUENE	89	63	135
9712095	VB971211-a1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	108	65	135
9712095	VB971211-a1LCS	SW8260A	BS	4-CHLOROTOLUENE	70	64	135
9712095	VB971211-a1LCS	SW8260A	BS	BENZENE	99	65	135
9712095	VB971211-a1LCS	SW8260A	BS	BROMOBENZENE	94	65	135
9712095	VB971211-a1LCS	SW8260A	BS	BROMOCHLOROMETHANE	109	63	135
9712095	VB971211-a1LCS	SW8260A	BS	BROMODICHLOROMETHANE	106	65	135
9712095	VB971211-a1LCS	SW8260A	BS	BROMOFORM	87	65	135
9712095	VB971211-a1LCS	SW8260A	BS	BROMOMETHANE	100	62	135
9712095	VB971211-a1LCS	SW8260A	BS	CARBON TETRACHLORIDE	101	52	135
9712095	VB971211-a1LCS	SW8260A	BS	CHLOROBENZENE	88	65	135
9712095	VB971211-a1LCS	SW8260A	BS	CHLOROETHANE	114	55	135
9712095	VB971211-a1LCS	SW8260A	BS	CHLOROFORM	100	64	135
9712095	VB971211-a1LCS	SW8260A	BS	CHLOROMETHANE	99	65	135
9712095	VB971211-a1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	101	65	135
9712095	VB971211-a1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	97	64	135
9712095	VB971211-a1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	84	63	135
9712095	VB971211-a1LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	107	65	135

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9712095	VB971211-aILCS	SW8260A	BS	DBROMOMETHANE	104	59	137
9712095	VB971211-aILCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	52	65	135
9712095	VB971211-aILCS	SW8260A	BS	ETHYL BENZENE	87	65	135
9712095	VB971211-aILCS	SW8260A	BS	HEXACHLOROBUTADIENE	88	65	135
9712095	VB971211-aILCS	SW8260A	BS	ISOPROPYLBENZENE	94	65	135
9712095	VB971211-aILCS	SW8260A	BS	M,P-XYLENE	90	65	135
9712095	VB971211-aILCS	SW8260A	BS	METHYLENE CHLORIDE	58	65	135
9712095	VB971211-aILCS	SW8260A	BS	N-BUTYL BENZENE	95	65	135
9712095	VB971211-aILCS	SW8260A	BS	N-PROPYLBENZENE	98	65	135
9712095	VB971211-aILCS	SW8260A	BS	NAPHTHALENE	79	65	135
9712095	VB971211-aILCS	SW8260A	BS	O-XYLENE	88	65	135
9712095	VB971211-aILCS	SW8260A	BS	P-ISOPROPYL TOLUENE	96	65	135
9712095	VB971211-aILCS	SW8260A	BS	SEC-BUTYL BENZENE	96	65	135
9712095	VB971211-aILCS	SW8260A	BS	STYRENE	93	65	135
9712095	VB971211-aILCS	SW8260A	BS	TERT-BUTYL BENZENE	98	65	135
9712095	VB971211-aILCS	SW8260A	BS	TETRACHLOROETHENE	80	61	135
9712095	VB971211-aILCS	SW8260A	BS	TOLUENE	94	64	135
9712095	VB971211-aILCS	SW8260A	BS	TOLUENE-D8	109	65	135
9712095	VB971211-aILCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	104	65	135
9712095	VB971211-aILCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	104	56	135

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	LowerLimit	Upper Limit
9712095	VB971211-aILCS	SW8260A	BS	TRICHLOROETHENE	101	61	135
9712095	VB971211-aILCS	SW8260A	BS	TRICHLOROFLUOROMETHANE	105	57	135
9712095	VB971211-aILCS	SW8260A	BS	VINYL CHLORIDE	56	36	144
9712123	VB971217-aILCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	100	62	108
9712123	VB971217-aILCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	100	65	135
9712123	VB971217-aILCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	132	64	135
9712123	VB971217-aILCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	109	65	135
9712123	VB971217-aILCS	SW8260A	BS	1,1-DICHLOROETHANE	104	62	135
9712123	VB971217-aILCS	SW8260A	BS	1,1-DICHLOROETHENE	115	65	135
9712123	VB971217-aILCS	SW8260A	BS	1,1-DICHLOROPROPENE	110	65	135
9712123	VB971217-aILCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	106	65	147
9712123	VB971217-aILCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	129	65	135
9712123	VB971217-aILCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	100	65	145
9712123	VB971217-aILCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	106	65	135
9712123	VB971217-aILCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROpane	124	49	135
9712123	VB971217-aILCS	SW8260A	BS	1,2-DIBROMOETHANE	106	65	135
9712123	VB971217-aILCS	SW8260A	BS	1,2-DICHLOROBENZENE	111	65	135
9712123	VB971217-aILCS	SW8260A	BS	1,2-DICHLOROETHANE	109	58	137
9712123	VB971217-aILCS	SW8260A	BS	1,2-DICHLOROPROPANE	109	60	135
9712123	VB971217-aILCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	116	62	135

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery			Lower Limit	Upper Limit
9712123	VB971217-a1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	119	65	65	135	135
9712123	VB971217-a1LCS	SW8260A	BS	1,3-DICHLOROPROPANE	110	65	65	135	135
9712123	VB971217-a1LCS	SW8260A	BS	1,4-DICHLOROBENZENE	108	65	65	135	135
9712123	VB971217-a1LCS	SW8260A	BS	1-CHLOROHEXANE	104	65	65	135	135
9712123	VB971217-a1LCS	SW8260A	BS	2,2-DICHLOROPROPANE	103	65	65	135	135
9712123	VB971217-a1LCS	SW8260A	BS	2-CHLOROTOLUENE	116	63	63	135	135
9712123	VB971217-a1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	102	65	65	135	135
9712123	VB971217-a1LCS	SW8260A	BS	4-CHLOROTOLUENE	118	64	64	135	135
9712123	VB971217-a1LCS	SW8260A	BS	BENZENE	103	65	65	135	135
9712123	VB971217-a1LCS	SW8260A	BS	BROMOBENZENE	121	65	65	135	135
9712123	VB971217-a1LCS	SW8260A	BS	BROMOCHLOROMETHANE	107	63	63	135	135
9712123	VB971217-a1LCS	SW8260A	BS	BROMODICHLOROMETHANE	106	65	65	135	135
9712123	VB971217-a1LCS	SW8260A	BS	BROMOFORM	107	65	65	135	135
9712123	VB971217-a1LCS	SW8260A	BS	BROMOMETHANE	91	62	62	135	135
9712123	VB971217-a1LCS	SW8260A	BS	CARBON TETRACHLORIDE	104	52	52	135	135
9712123	VB971217-a1LCS	SW8260A	BS	CHLOROBENZENE	104	65	65	135	135
9712123	VB971217-a1LCS	SW8260A	BS	CHLOROETHANE	104	55	55	135	135
9712123	VB971217-a1LCS	SW8260A	BS	CHLOROFORM	101	64	64	135	135
9712123	VB971217-a1LCS	SW8260A	BS	CHLORMETHANE	90	65	65	135	135
9712123	VB971217-a1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	100	65	65	135	135

SDG	LabSampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9712123	VB971217-a1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	101	64	135
9712123	VB971217-a1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	103	63	135
9712123	VB971217-a1LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	96	65	135
9712123	VB971217-a1LCS	SW8260A	BS	DIBROMOMETHANE	109	59	137
9712123	VB971217-a1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	40	65	135
9712123	VB971217-a1LCS	SW8260A	BS	ETHYLBENZENE	102	65	135
9712123	VB971217-a1LCS	SW8260A	BS	HEXACHLOROBUTADIENE	103	65	135
9712123	VB971217-a1LCS	SW8260A	BS	ISOPROPYLBENZENE	121	65	135
9712123	VB971217-a1LCS	SW8260A	BS	M,P-XYLENE	100	65	135
9712123	VB971217-a1LCS	SW8260A	BS	METHYLENE CHLORIDE	55	65	135
9712123	VB971217-a1LCS	SW8260A	BS	N-BUTYLBENZENE	109	65	135
9712123	VB971217-a1LCS	SW8260A	BS	N-PROPYLBENZENE	117	65	135
9712123	VB971217-a1LCS	SW8260A	BS	NAPHTHALENE	102	65	135
9712123	VB971217-a1LCS	SW8260A	BS	O-XYLENE	103	65	135
9712123	VB971217-a1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	113	65	135
9712123	VB971217-a1LCS	SW8260A	BS	SEC-BUTYL BENZENE	114	65	135
9712123	VB971217-a1LCS	SW8260A	BS	STYRENE	107	65	135
9712123	VB971217-a1LCS	SW8260A	BS	TERT-BUTYL BENZENE	114	65	135
9712123	VB971217-a1LCS	SW8260A	BS	TETRACHLOROETHENE	101	61	135
9712123	VB971217-a1LCS	SW8260A	BS	TOLUENE	102	64	135

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9712123	VB971217-a1LCS	SW8260A	BS	TOLUENE-D8	99	65	135
9712123	VB971217-a1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	105	65	135
9712123	VB971217-a1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	103	56	135
9712123	VB971217-a1LCS	SW8260A	BS	TRICHLOROETHENE	101	61	135
9712123	VB971217-a1LCS	SW8260A	BS	TRICHLOROFLUOROMETHANE	98	57	135
9712123	VB971217-a1LCS	SW8260A	BS	VINYL CHLORIDE	89	36	144
9712185	9712185-5SD	SW9060	SD	TOTAL ORGANIC CARBON	104		
9712185	9712185-7DS	SW6010A	SD	ALUMINUM			
9712185	9712185-7DS	SW6010A	SD	CALCIUM			
9712185	9712185-7DS	SW6010A	SD	IRON			
9712185	9712185-7DS	SW6010A	SD	LEAD			
9712185	9712185-7DS	SW6010A	SD	MAGNESIUM			
9712185	9712185-7DS	SW6010A	SD	POTASSIUM			
9712185	9712185-7DS	SW6010A	SD	SODIUM			
9712185	9712185-7MSD	SW8260A	SD	1,1,1,2-TETRACHLOROETHANE	98	72	125
9712185	9712185-7MSD	SW8260A	SD	1,1,1-TRICHLOROETHANE	119	75	125
9712185	9712185-7MSD	SW8260A	SD	1,1,2,2-TETRACHLOROETHANE	114	74	125
9712185	9712185-7MSD	SW8260A	SD	1,1,2-TRICHLOROETHANE	114	75	127
9712185	9712185-7MSD	SW8260A	SD	1,1-DICHLOROETHANE	124	72	125
9712185	9712185-7MSD	SW8260A	SD	1,1-DICHLOROETHENE	120	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9712185	9712185-7MSD	SW8260A	SD	1,1-DICHLOROPROPENE	103	75	125
9712185	9712185-7MSD	SW8260A	SD	1,2,3-TRICHLOROBENZENE	98	75	137
9712185	9712185-7MSD	SW8260A	SD	1,2,3-TRICHLOROPROPANE	104	75	125
9712185	9712185-7MSD	SW8260A	SD	1,2,4-TRICHLOROBENZENE	97	75	135
9712185	9712185-7MSD	SW8260A	SD	1,2,4-TRIMETHYLBENZENE	91	75	125
9712185	9712185-7MSD	SW8260A	SD	1,2-DIBROMO-3-CHLOROPROPANE	119	59	125
9712185	9712185-7MSD	SW8260A	SD	1,2-DIBROMOETHANE	115	75	125
9712185	9712185-7MSD	SW8260A	SD	1,2-DICHLOROBENZENE	96	75	125
9712185	9712185-7MSD	SW8260A	SD	1,2-DICHLOROETHANE	141	68	127
9712185	9712185-7MSD	SW8260A	SD	1,2-DICHLOROPROPANE	124	70	125
9712185	9712185-7MSD	SW8260A	SD	1,3,5-TRIMETHYL BENZENE	93	72	112
9712185	9712185-7MSD	SW8260A	SD	1,3-DICHLOROBENZENE	93	75	125
9712185	9712185-7MSD	SW8260A	SD	1,3-DICHLOROPROPANE	116	75	125
9712185	9712185-7MSD	SW8260A	SD	1,4-DICHLOROBENZENE	92	75	125
9712185	9712185-7MSD	SW8260A	SD	1-CHLOROHEXANE	89	75	125
9712185	9712185-7MSD	SW8260A	SD	2,2-DICHLOROPROPANE	67	75	125
9712185	9712185-7MSD	SW8260A	SD	2-CHLOROTOLUENE	101	73	125
9712185	9712185-7MSD	SW8260A	SD	4-BROMOFLUOROBENZENE	106	75	125
9712185	9712185-7MSD	SW8260A	SD	4-CHLOROTOLUENE	96	74	125
9712185	9712185-7MSD	SW8260A	SD	BENZENE	113	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9712185	9712185-7MSD	SW8260A	SD	BROMOBENZENE	115	75	125
9712185	9712185-7MSD	SW8260A	SD	BROMOCHLOROMETHANE	119	73	125
9712185	9712185-7MSD	SW8260A	SD	BROMODICHLOROMETHANE	125	75	125
9712185	9712185-7MSD	SW8260A	SD	BROMOFORM	114	75	125
9712185	9712185-7MSD	SW8260A	SD	BROMOMETHANE	111	72	125
9712185	9712185-7MSD	SW8260A	SD	CARBON TETRACHLORIDE	113	62	125
9712185	9712185-7MSD	SW8260A	SD	CHLOROBENZENE	100	75	125
9712185	9712185-7MSD	SW8260A	SD	CHLOROETHANE	122	65	125
9712185	9712185-7MSD	SW8260A	SD	CHLOROFORM	121	74	125
9712185	9712185-7MSD	SW8260A	SD	CHLORMETHANE	120	75	125
9712185	9712185-7MSD	SW8260A	SD	CIS-1,2-DICHLOROETHENE	118	75	125
9712185	9712185-7MSD	SW8260A	SD	CIS-1,3-DICHLOROPROPENE	111	74	125
9712185	9712185-7MSD	SW8260A	SD	DIBROMOCHLOROMETHANE	114	73	125
9712185	9712185-7MSD	SW8260A	SD	DIBROMOMETHANE	116	75	125
9712185	9712185-7MSD	SW8260A	SD	DICHLORODIFLUOROMETHANE	131	69	127
9712185	9712185-7MSD	SW8260A	SD	ETHYL BENZENE	101	75	125
9712185	9712185-7MSD	SW8260A	SD	HEXACHLOROBUTADIENE	84	75	125
9712185	9712185-7MSD	SW8260A	SD	ISOPROPYL BENZENE	90	75	125
9712185	9712185-7MSD	SW8260A	SD	M,P-XYLENE	124	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9712185	9712185-7MSD	SW8260A	SD	METHYLENE CHLORIDE	68	75	125
9712185	9712185-7MSD	SW8260A	SD	N-BUTYLBENZENE	91	75	125
9712185	9712185-7MSD	SW8260A	SD	N-PROPYLBENZENE	94	75	125
9712185	9712185-7MSD	SW8260A	SD	NAPHTHALENE	94	75	125
9712185	9712185-7MSD	SW8260A	SD	O-XYLENE	104	75	125
9712185	9712185-7MSD	SW8260A	SD	P-ISOPROPYL TOLUENE	84	75	125
9712185	9712185-7MSD	SW8260A	SD	SEC-BUTYL BENZENE	90	75	125
9712185	9712185-7MSD	SW8260A	SD	STYRENE	67	75	125
9712185	9712185-7MSD	SW8260A	SD	TERT-BUTYL BENZENE	85	75	125
9712185	9712185-7MSD	SW8260A	SD	TETRACHLOROETHENE	86	71	125
9712185	9712185-7MSD	SW8260A	SD	TOLUENE	110	74	125
9712185	9712185-7MSD	SW8260A	SD	TOLUENE-D8	114	75	125
9712185	9712185-7MSD	SW8260A	SD	TRANS-1,2-DICHLOROETHENE	129	75	125
9712185	9712185-7MSD	SW8260A	SD	TRANS-1,3-DICHLOROPROPENE	121	66	125
9712185	9712185-7MSD	SW8260A	SD	TRICHLOROETHENE	113	71	125
9712185	9712185-7MSD	SW8260A	SD	TRICHLOROFLUOROMETHANE	125	67	125
9712185	9712185-7MSD	SW9056	SD	VINYL CHLORIDE	116	46	134
9712185	9712185-7MSD	SW9056	SD	BROMIDE	108		
9712185	9712185-7MSD	SW9056	SD	CHLORIDE	102		
9712185	9712185-7MSD	SW9056	SD	FLUORIDE	112		

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9712185	9712185-7MSD	SW9056	SD	NITRATE	108		
9712185	9712185-7MSD	SW9056	SD	NITRITE	113		
9712185	9712185-7MSD	SW9056	SD	ORTHOPHOSPHATE	111		
9712185	9712185-7MSD	SW9056	SD	SULFATE	99		
9712185	AK971222-1	E310.1	BS	TOTAL ALKALINITY	100		
9712185	BR971219-1	SW9056	BS	BROMIDE	97		
9712185	CL971227-1	SW9056	BS	CHLORIDE	98		
9712185	FL971219-1	SW9056	BS	FLUORIDE	101		
9712185	LCSW1222-005	SW6010A	BS	ALUMINUM	105.6		
9712185	LCSW1222-005	SW6010A	BS	CALCIUM	98.7		
9712185	LCSW1222-005	SW6010A	BS	IRON	103.9		
9712185	LCSW1222-005	SW6010A	BS	LEAD	100.6		
9712185	LCSW1222-005	SW6010A	BS	MAGNESIUM	94.8		
9712185	LCSW1222-005	SW6010A	BS	POTASSIUM	90		
9712185	LCSW1222-005	SW6010A	BS	SODIUM	94		
9712185	NA971219-1	SW9056	BS	NITRATE	99		
9712185	NI971219-1	SW9056	BS	NITRITE	96		
9712185	PO971219-1	SW9056	BS	ORTHOPHOSPHATE	94		
9712185	SO971223-1	SW9056	BS	SULFATE	93		
9712185	VA971223-1LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	110	72	125

SDG	LabsampleID	Method	QC Type	Analyte	% Recovery	Lower Limit	Upper Limit
9712185	VA971223-1LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	113	75	125
9712185	VA971223-1LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	92	74	125
9712185	VA971223-1LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	107	75	127
9712185	VA971223-1LCS	SW8260A	BS	1,1-DICHLOROETHANE	112	72	125
9712185	VA971223-1LCS	SW8260A	BS	1,1-DICHLOROETHENE	121	75	125
9712185	VA971223-1LCS	SW8260A	BS	1,1-DICHLOROPROPENE	117	75	125
9712185	VA971223-1LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	95	75	137
9712185	VA971223-1LCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	106	75	125
9712185	VA971223-1LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	102	75	135
9712185	VA971223-1LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	105	75	125
9712185	VA971223-1LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROpane	96	59	125
9712185	VA971223-1LCS	SW8260A	BS	1,2-DIBROMOETHANE	115	75	125
9712185	VA971223-1LCS	SW8260A	BS	1,2-DICHLOROBENZENE	100	75	125
9712185	VA971223-1LCS	SW8260A	BS	1,2-DICHLOROPROPANE	128	70	125
9712185	VA971223-1LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	103	72	112
9712185	VA971223-1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	98	75	125
9712185	VA971223-1LCS	SW8260A	BS	1,3-DICHLOROPROPANE	114	75	125
9712185	VA971223-1LCS	SW8260A	BS	1,4-DICHLOROBENZENE	96	75	125
9712185	VA971223-1LCS	SW8260A	BS	1-CHLOROHEXANE	107	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9712185	VA971223-1LCS	SW8260A	BS	2,2-DICHLOROPROpane	119	75	125
9712185	VA971223-1LCS	SW8260A	BS	2-CHLOROTOLUENE	109	73	125
9712185	VA971223-1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	100	75	125
9712185	VA971223-1LCS	SW8260A	BS	4-CHLOROTOLUENE	108	74	125
9712185	VA971223-1LCS	SW8260A	BS	BENZENE	113	75	125
9712185	VA971223-1LCS	SW8260A	BS	BROMOBENZENE	98	75	125
9712185	VA971223-1LCS	SW8260A	BS	BROMOCHLOROMETHANE	112	73	125
9712185	VA971223-1LCS	SW8260A	BS	BROMODICHLOROMETHANE	125	75	125
9712185	VA971223-1LCS	SW8260A	BS	BROMOFORM	120	75	125
9712185	VA971223-1LCS	SW8260A	BS	BROMOMETHANE	113	72	125
9712185	VA971223-1LCS	SW8260A	BS	CARBON TETRACHLORIDE	120	62	125
9712185	VA971223-1LCS	SW8260A	BS	CHLOROBENZENE	111	75	125
9712185	VA971223-1LCS	SW8260A	BS	CHLOROETHANE	126	65	125
9712185	VA971223-1LCS	SW8260A	BS	CHLOROFORM	114	74	125
9712185	VA971223-1LCS	SW8260A	BS	CHLORMETHANE	109	75	125
9712185	VA971223-1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	116	75	125
9712185	VA971223-1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	120	74	125
9712185	VA971223-1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	118	73	125
9712185	VA971223-1LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	97	75	125
9712185	VA971223-1LCS	SW8260A	BS	DIBROMOMETHANE	128	69	127

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9712185	VA971223-1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	103	75	125
9712185	VA971223-1LCS	SW8260A	BS	ETHYLBENZENE	113	75	125
9712185	VA971223-1LCS	SW8260A	BS	HEXACHLOROBUTADIENE	103	75	125
9712185	VA971223-1LCS	SW8260A	BS	ISOPROPYLBENZENE	107	75	125
9712185	VA971223-1LCS	SW8260A	BS	M,P-XYLENE	137	75	125
9712185	VA971223-1LCS	SW8260A	BS	METHYLENE CHLORIDE	59	75	125
9712185	VA971223-1LCS	SW8260A	BS	N-BUTYLBENZENE	104	75	125
9712185	VA971223-1LCS	SW8260A	BS	N-PROPYLBENZENE	101	75	125
9712185	VA971223-1LCS	SW8260A	BS	NAPHTHALENE	90	75	125
9712185	VA971223-1LCS	SW8260A	BS	O-XYLENE	111	75	125
9712185	VA971223-1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	103	75	125
9712185	VA971223-1LCS	SW8260A	BS	SEC-BUTYLBENZENE	105	75	125
9712185	VA971223-1LCS	SW8260A	BS	STYRENE	111	75	125
9712185	VA971223-1LCS	SW8260A	BS	TERT-BUTYLBENZENE	100	75	125
9712185	VA971223-1LCS	SW8260A	BS	TETRACHLOROETHENE	103	71	125
9712185	VA971223-1LCS	SW8260A	BS	TOLUENE	109	74	125
9712185	VA971223-1LCS	SW8260A	BS	TOLUENE-D8	107	75	125
9712185	VA971223-1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	116	75	125
9712185	VA971223-1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	118	66	125
9712185	VA971223-1LCS	SW8260A	BS	TRICHLOROETHENE	124	71	125

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9712185	VA971223-1LCS	SW8260A	BS	TRICHLOROFLUOROMETHANE	131	67	125
9712185	VA971223-1LCS	SW8260A	BS	VINYL CHLORIDE	119	46	134
9712202	AK980102-1	E310.1	BS	TOTAL ALKALINITY	97		
9712202	BR971219-2	SW9056	BS	BROMIDE	97		
9712202	CL971219-1	SW9056	BS	CHLORIDE	96		
9712202	CL971223-1	SW9056	BS	CHLORIDE	94		
9712202	FL971219-2	SW9056	BS	FLUORIDE	101		
9712202	LCSW1231-003	SW6010A	BS	ALUMINUM	95.4		
9712202	LCSW1231-003	SW6010A	BS	CALCIUM	95.8		
9712202	LCSW1231-003	SW6010A	BS	IRON	90.8		
9712202	LCSW1231-003	SW6010A	BS	LEAD	91.7		
9712202	LCSW1231-003	SW6010A	BS	MAGNESIUM	97.2		
9712202	LCSW1231-003	SW6010A	BS	POTASSIUM	97.9		
9712202	NA971219-2	SW9056	BS	SODIUM	98.4		
9712202	NI971219-2	SW9056	BS	NITRATE	99		
9712202	PO971219-2	SW9056	BS	NITRITE	96		
9712202	SO971219-2	SW9056	BS	ORTHOPHOSPHATE	94		
9712202	VA971223-1LCS	SW8260A	BS	SULFATE	99		
9712202	VA971223-1LCS	SW8260A	BS	1,1,2-TETRACHLOROETHANE	110	72	125
				1,1,1-TRICHLOROETHANE	113	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9712202	VA971223-1LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	92	74	125
9712202	VA971223-1LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	107	75	127
9712202	VA971223-1LCS	SW8260A	BS	1,1-DICHLOROETHANE	112	72	125
9712202	VA971223-1LCS	SW8260A	BS	1,1-DICHLOROETHENE	121	75	125
9712202	VA971223-1LCS	SW8260A	BS	1,1-DICHLOROPROPENE	117	75	125
9712202	VA971223-1LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	95	75	137
9712202	VA971223-1LCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	106	75	125
9712202	VA971223-1LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	102	75	135
9712202	VA971223-1LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	105	75	125
9712202	VA971223-1LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROPANE	96	59	125
9712202	VA971223-1LCS	SW8260A	BS	1,2-DIBROMOETHANE	115	75	125
9712202	VA971223-1LCS	SW8260A	BS	1,2-DICHLOROBENZENE	100	75	125
9712202	VA971223-1LCS	SW8260A	BS	1,2-DICHLOROETHANE	136	68	127
9712202	VA971223-1LCS	SW8260A	BS	1,2-DICHLOROPROPANE	128	70	125
9712202	VA971223-1LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	103	72	112
9712202	VA971223-1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	98	75	125
9712202	VA971223-1LCS	SW8260A	BS	1,3-DICHLOROPROPANE	114	75	125
9712202	VA971223-1LCS	SW8260A	BS	1,4-DICHLOROBENZENE	96	75	125
9712202	VA971223-1LCS	SW8260A	BS	1-CHLOROHEXANE	107	75	125
9712202	VA971223-1LCS	SW8260A	BS	2,2-DICHLOROPROPANE	119	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9712202	VA971223-1LCS	SW8260A	BS	2-CHLOROTOLUENE	109	73	125
9712202	VA971223-1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	100	75	125
9712202	VA971223-1LCS	SW8260A	BS	4-CHLOROTOLUENE	108	74	125
9712202	VA971223-1LCS	SW8260A	BS	BENZENE	113	75	125
9712202	VA971223-1LCS	SW8260A	BS	BROMOBENZENE	98	75	125
9712202	VA971223-1LCS	SW8260A	BS	BROMOCHLOROMETHANE	112	73	125
9712202	VA971223-1LCS	SW8260A	BS	BROMODICHLOROMETHANE	125	75	125
9712202	VA971223-1LCS	SW8260A	BS	BROMOFORM	120	75	125
9712202	VA971223-1LCS	SW8260A	BS	BROMOMETHANE	113	72	125
9712202	VA971223-1LCS	SW8260A	BS	CARBON TETRACHLORIDE	120	62	125
9712202	VA971223-1LCS	SW8260A	BS	CHLOROBENZENE	111	75	125
9712202	VA971223-1LCS	SW8260A	BS	CHLOROETHANE	126	65	125
9712202	VA971223-1LCS	SW8260A	BS	CHLOROFORM	114	74	125
9712202	VA971223-1LCS	SW8260A	BS	CHLORMETHANE	109	75	125
9712202	VA971223-1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	116	75	125
9712202	VA971223-1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	120	74	125
9712202	VA971223-1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	118	73	125
9712202	VA971223-1LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	97	75	125
9712202	VA971223-1LCS	SW8260A	BS	DIBROMOMETHANE	128	69	127
9712202	VA971223-1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	103	75	125

652

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9712202	VA971223-1LCS	SW8260A	BS	ETHYLBENZENE	113	75	125
9712202	VA971223-1LCS	SW8260A	BS	HEXACHLOROBUTADIENE	103	75	125
9712202	VA971223-1LCS	SW8260A	BS	ISOPROPYLBENZENE	107	75	125
9712202	VA971223-1LCS	SW8260A	BS	M,P-XYLENE	137	75	125
9712202	VA971223-1LCS	SW8260A	BS	METHYLENE CHLORIDE	59	75	125
9712202	VA971223-1LCS	SW8260A	BS	N-BUTYLBENZENE	104	75	125
9712202	VA971223-1LCS	SW8260A	BS	N-PROPYLBENZENE	101	75	125
9712202	VA971223-1LCS	SW8260A	BS	NAPHTHALENE	90	75	125
9712202	VA971223-1LCS	SW8260A	BS	O-XYLENE	111	75	125
9712202	VA971223-1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	103	75	125
9712202	VA971223-1LCS	SW8260A	BS	SEC-BUTYL BENZENE	105	75	125
9712202	VA971223-1LCS	SW8260A	BS	STYRENE	111	75	125
9712202	VA971223-1LCS	SW8260A	BS	TERT-BUTYL BENZENE	100	75	125
9712202	VA971223-1LCS	SW8260A	BS	TETRACHLOROETHENE	103	71	125
9712202	VA971223-1LCS	SW8260A	BS	TOLUENE	109	74	125
9712202	VA971223-1LCS	SW8260A	BS	TOLUENE-D8	107	75	125
9712202	VA971223-1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	116	75	125
9712202	VA971223-1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	118	66	125
9712202	VA971223-1LCS	SW8260A	BS	TRICHLOROETHENE	124	71	125
9712202	VA971223-1LCS	SW8260A	BS	TRICHLOROFLUOROMETHANE	131	67	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9712202	VA971223-1LCS	SW8260A	BS	VINYL CHLORIDE	119	46	134
9712202	VA971226-1LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	93	72	125
9712202	VA971226-1LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	111	75	125
9712202	VA971226-1LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	104	74	125
9712202	VA971226-1LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	101	75	127
9712202	VA971226-1LCS	SW8260A	BS	1,1-DICHLOROETHANE	107	72	125
9712202	VA971226-1LCS	SW8260A	BS	1,1,1-DICHLOROETHANE	105	75	125
9712202	VA971226-1LCS	SW8260A	BS	1,1,2,3-TRICHLOROBENZENE	102	75	125
9712202	VA971226-1LCS	SW8260A	BS	1,2,3-TRICHLOROPROPENE	106	75	125
9712202	VA971226-1LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	100	75	137
9712202	VA971226-1LCS	SW8260A	BS	1,2,3-TRIMETHYLBENZENE	95	75	125
9712202	VA971226-1LCS	SW8260A	BS	1,2,4-DIBROMO-3-CHLOROPROpane	107	75	125
9712202	VA971226-1LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	100	75	135
9712202	VA971226-1LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	107	75	125
9712202	VA971226-1LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROpane	117	59	125
9712202	VA971226-1LCS	SW8260A	BS	1,2-DIBROMOETHANE	91	75	125
9712202	VA971226-1LCS	SW8260A	BS	1,2-DICHLOROBENZENE	98	75	125
9712202	VA971226-1LCS	SW8260A	BS	1,2-DICHLOROPROPANE	104	70	125
9712202	VA971226-1LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	101	72	112
9712202	VA971226-1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	94	75	125
9712202	VA971226-1LCS	SW8260A	BS	1,3-DICHLOROPROPANE	102	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9712202	VA971226-1LCS	SW8260A	BS	1,4-DICHLOROBENZENE	95	75	125
9712202	VA971226-1LCS	SW8260A	BS	1-CHLOROHEXANE	97	75	125
9712202	VA971226-1LCS	SW8260A	BS	2,2-DICHLOROPROPANE	103	75	125
9712202	VA971226-1LCS	SW8260A	BS	2-CHLOROTOLUENE	103	73	125
9712202	VA971226-1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	104	75	125
9712202	VA971226-1LCS	SW8260A	BS	4-CHLOROTOLUENE	99	74	125
9712202	VA971226-1LCS	SW8260A	BS	BENZENE	100	75	125
9712202	VA971226-1LCS	SW8260A	BS	BROMOBENZENE	110	75	125
9712202	VA971226-1LCS	SW8260A	BS	BROMOCHLOROMETHANE	101	73	125
9712202	VA971226-1LCS	SW8260A	BS	BROMODICHLOROMETHANE	105	75	125
9712202	VA971226-1LCS	SW8260A	BS	BROMOFORM	98	75	125
9712202	VA971226-1LCS	SW8260A	BS	BROMOMETHANE	94	72	125
9712202	VA971226-1LCS	SW8260A	BS	CARBON TETRACHLORIDE	106	62	125
9712202	VA971226-1LCS	SW8260A	BS	CHLOROBENZENE	98	75	125
9712202	VA971226-1LCS	SW8260A	BS	CHLOROETHANE	100	65	125
9712202	VA971226-1LCS	SW8260A	BS	CHLOROFORM	98	74	125
9712202	VA971226-1LCS	SW8260A	BS	CHLORMETHANE	100	75	125
9712202	VA971226-1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	105	75	125
9712202	VA971226-1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	104	74	125
9712202	VA971226-1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	94	73	125

SDG	LabSampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9712202	VA971226-1LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	106	75	125
9712202	VA971226-1LCS	SW8260A	BS	DIBROMOMETHANE	109	69	127
9712202	VA971226-1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	102	75	125
9712202	VA971226-1LCS	SW8260A	BS	ETHYL BENZENE	100	75	125
9712202	VA971226-1LCS	SW8260A	BS	HEXACHLOROBUTADIENE	103	75	125
9712202	VA971226-1LCS	SW8260A	BS	ISOPROPYL BENZENE	100	75	125
9712202	VA971226-1LCS	SW8260A	BS	M,P,XYLENE	101	75	125
9712202	VA971226-1LCS	SW8260A	BS	METHYLENE CHLORIDE	76	75	125
9712202	VA971226-1LCS	SW8260A	BS	N-BUTYL BENZENE	104	75	125
9712202	VA971226-1LCS	SW8260A	BS	N-PROPYLBENZENE	108	75	125
9712202	VA971226-1LCS	SW8260A	BS	NAPHTHALENE	98	75	125
9712202	VA971226-1LCS	SW8260A	BS	O-XYLENE	99	75	125
9712202	VA971226-1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	100	75	125
9712202	VA971226-1LCS	SW8260A	BS	SEC-BUTYL BENZENE	99	75	125
9712202	VA971226-1LCS	SW8260A	BS	STYRENE	96	75	125
9712202	VA971226-1LCS	SW8260A	BS	TERT-BUTYL BENZENE	98	75	125
9712202	VA971226-1LCS	SW8260A	BS	TETRACHLOROETHENE	97	71	125
9712202	VA971226-1LCS	SW8260A	BS	TOLUENE	100	74	125
9712202	VA971226-1LCS	SW8260A	BS	TOLUENE-D8	104	75	125
9712202	VA971226-1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	106	75	125

652

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9712202	VA971226-1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	104	66	125
9712202	VA971226-1LCS	SW8260A	BS	TRICHLOROETHENE	102	71	125
9712202	VA971226-1LCS	SW8260A	BS	TRICHLOROFLUOROMETHANE	105	67	125
9712202	VA971226-1LCS	SW8260A	BS	VINYL CHLORIDE	102	46	134
9712205	VA971230-1LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	98	72	125
9712205	VA971230-1LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	104	75	125
9712205	VA971230-1LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	105	74	125
9712205	VA971230-1LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	100	75	127
9712205	VA971230-1LCS	SW8260A	BS	1,1-DICHLOROETHANE	105	72	125
9712205	VA971230-1LCS	SW8260A	BS	1,1,2-DICHLOROETHANE	100	75	125
9712205	VA971230-1LCS	SW8260A	BS	1,1-DICHLOROETHENE	107	75	125
9712205	VA971230-1LCS	SW8260A	BS	1,1,1-DICHLOROPROPENE	105	72	125
9712205	VA971230-1LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	96	75	137
9712205	VA971230-1LCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	94	75	125
9712205	VA971230-1LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	94	75	135
9712205	VA971230-1LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	104	75	125
9712205	VA971230-1LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROPANE	111	59	125
9712205	VA971230-1LCS	SW8260A	BS	1,2-DIBROMOETHANE	97	75	125
9712205	VA971230-1LCS	SW8260A	BS	1,2-DICHLOROBENZENE	93	75	125
9712205	VA971230-1LCS	SW8260A	BS	1,2-DICHLOROETHANE	115	68	127
9712205	VA971230-1LCS	SW8260A	BS	1,2-DICHLOROPROpane	102	70	125

SDG	LabSampleID	Method	QC Type	Analyte	%Recovery		Lower Limit	Upper Limit
9712205	VA971230-1LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	100	72	72	112
9712205	VA971230-1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	95	75	75	125
9712205	VA971230-1LCS	SW8260A	BS	1,3-DICHLOROPROpane	100	75	75	125
9712205	VA971230-1LCS	SW8260A	BS	1,4-DICHLOROBENZENE	94	75	75	125
9712205	VA971230-1LCS	SW8260A	BS	1-CHLOROHEXANE	100	75	75	125
9712205	VA971230-1LCS	SW8260A	BS	2,2-DICHLOROPROpane	114	75	75	125
9712205	VA971230-1LCS	SW8260A	BS	2-CHLOROToluene	104	73	73	125
9712205	VA971230-1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	103	75	75	125
9712205	VA971230-1LCS	SW8260A	BS	4-CHLOROToluene	101	74	74	125
9712205	VA971230-1LCS	SW8260A	BS	BENZENE	98	75	75	125
9712205	VA971230-1LCS	SW8260A	BS	BROMOBENZENE	98	75	75	125
9712205	VA971230-1LCS	SW8260A	BS	BROMOCHLOROMETHANE	93	73	73	125
9712205	VA971230-1LCS	SW8260A	BS	BROMODICHLOROMETHANE	107	75	75	125
9712205	VA971230-1LCS	SW8260A	BS	BROMOFORM	102	75	75	125
9712205	VA971230-1LCS	SW8260A	BS	BROMOMETHANE	104	72	72	125
9712205	VA971230-1LCS	SW8260A	BS	CARBON TETRACHLORIDE	111	62	62	125
9712205	VA971230-1LCS	SW8260A	BS	CHLOROBENZENE	100	75	75	125
9712205	VA971230-1LCS	SW8260A	BS	CHLOROETHANE	109	65	65	125
9712205	VA971230-1LCS	SW8260A	BS	CHLOROFORM	100	74	74	125
9712205	VA971230-1LCS	SW8260A	BS	CHLORMETHANE	97	75	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9712205	VA971230-1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	99	75	125
9712205	VA971230-1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	107	74	125
9712205	VA971230-1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	100	73	125
9712205	VA971230-1LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	101	75	125
9712205	VA971230-1LCS	SW8260A	BS	DIBROMOMETHANE	110	69	127
9712205	VA971230-1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	106	75	125
9712205	VA971230-1LCS	SW8260A	BS	ETHYLBENZENE	104	75	125
9712205	VA971230-1LCS	SW8260A	BS	HEXACHLOROBUTADIENE	107	75	125
9712205	VA971230-1LCS	SW8260A	BS	ISOPROPYLBENZENE	100	75	125
9712205	VA971230-1LCS	SW8260A	BS	M,P-XYLENE	106	75	125
9712205	VA971230-1LCS	SW8260A	BS	METHYLENE CHLORIDE	71	75	125
9712205	VA971230-1LCS	SW8260A	BS	N-BUTYLBENZENE	105	75	125
9712205	VA971230-1LCS	SW8260A	BS	N-PROPYLBENZENE	106	75	125
9712205	VA971230-1LCS	SW8260A	BS	NAPHTHALENE	86	75	125
9712205	VA971230-1LCS	SW8260A	BS	O-XYLENE	107	75	125
9712205	VA971230-1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	99	75	125
9712205	VA971230-1LCS	SW8260A	BS	SEC-BUTYL BENZENE	103	75	125
9712205	VA971230-1LCS	SW8260A	BS	STYRENE	101	75	125
9712205	VA971230-1LCS	SW8260A	BS	TERT-BUTYL BENZENE	101	75	125
9712205	VA971230-1LCS	SW8260A	BS	TETRACHLOROETHENE	104	71	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9712205	VA971230-1LCS	SW8260A	BS	TOLUENE	100	74	125
9712205	VA971230-1LCS	SW8260A	BS	TOLUENE-D8	100	75	125
9712205	VA971230-1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	102	75	125
9712205	VA971230-1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	103	66	125
9712205	VA971230-1LCS	SW8260A	BS	TRICHLOROETHENE	100	71	125
9712205	VA971230-1LCS	SW8260A	BS	TRICHLOROFLUROMETHANE	114	67	125
9712205	VA971230-1LCS	SW8260A	BS	VINYL CHLORIDE	106	46	134
9712227	9712227-10MSD	SW8260A	SD	1,1,1,2-TETRACHLOROETHANE	105	72	125
9712227	9712227-10MSD	SW8260A	SD	1,1,1-TRICHLOROETHANE	117	75	125
9712227	9712227-10MSD	SW8260A	SD	1,1,2,2-TETRACHLOROETHANE	109	74	125
9712227	9712227-10MSD	SW8260A	SD	1,1,2-TRICHLOROETHANE	110	75	127
9712227	9712227-10MSD	SW8260A	SD	1,1-DICHLOROETHANE	115	72	125
9712227	9712227-10MSD	SW8260A	SD	1,1-DICHLOROETHENE	121	75	125
9712227	9712227-10MSD	SW8260A	SD	1,1-DICHLOROPROPENE	110	75	125
9712227	9712227-10MSD	SW8260A	SD	1,2,3-TRICHLOROBENZENE	98	75	137
9712227	9712227-10MSD	SW8260A	SD	1,2,3-TRICHLOROPROPANE	97	75	125
9712227	9712227-10MSD	SW8260A	SD	1,2,4-TRICHLOROBENZENE	105	75	135
9712227	9712227-10MSD	SW8260A	SD	1,2,4-TRIMETHYLBENZENE	102	75	125
9712227	9712227-10MSD	SW8260A	SD	1,2-DIBROMO-3-CHLOROPROPANE	122	59	125
9712227	9712227-10MSD	SW8260A	SD	1,2-DIBROMOETHANE	104	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9712227	9712227-10MSD	SW8260A	SD	1,2-DICHLOROBENZENE	95	75	125
9712227	9712227-10MSD	SW8260A	SD	1,2-DICHLOROETHANE	130	68	127
9712227	9712227-10MSD	SW8260A	SD	1,2-DICHLOROPROPANE	115	70	125
9712227	9712227-10MSD	SW8260A	SD	1,3,5-TRIMETHYLBENZENE	71	72	112
9712227	9712227-10MSD	SW8260A	SD	1,3-DICHLOROBENZENE	94	75	125
9712227	9712227-10MSD	SW8260A	SD	1,3-DICHLOROPROPANE	109	75	125
9712227	9712227-10MSD	SW8260A	SD	1,4-DICHLOROBENZENE	95	75	125
9712227	9712227-10MSD	SW8260A	SD	1-CHLOROHEXANE	103	75	125
9712227	9712227-10MSD	SW8260A	SD	2,2-DICHLOROPROPANE	115	75	125
9712227	9712227-10MSD	SW8260A	SD	2-CHLOROTOLUENE	100	73	125
9712227	9712227-10MSD	SW8260A	SD	4-BROMOFLUOROBENZENE	106	75	125
9712227	9712227-10MSD	SW8260A	SD	4-CHLOROTOLUENE	103	74	125
9712227	9712227-10MSD	SW8260A	SD	BENZENE	103	75	125
9712227	9712227-10MSD	SW8260A	SD	BROMOBENZENE	117	75	125
9712227	9712227-10MSD	SW8260A	SD	BROMOCHLOROMETHANE	112	73	125
9712227	9712227-10MSD	SW8260A	SD	BROMODICHLOROMETHANE	116	75	125
9712227	9712227-10MSD	SW8260A	SD	BROMOFORM	124	75	125
9712227	9712227-10MSD	SW8260A	SD	BROMOMETHANE	108	72	125
9712227	9712227-10MSD	SW8260A	SD	CARBON TETRACHLORIDE	117	62	125
9712227	9712227-10MSD	SW8260A	SD	CHLOROBENZENE	103	75	125

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>LowerLimit</u>	<u>Upper Limit</u>
9712227	9712227-10MSD	SW8260A	SD	CHLOROETHANE	121	65	125
9712227	9712227-10MSD	SW8260A	SD	CHLOROFORM	111	74	125
9712227	9712227-10MSD	SW8260A	SD	CHLOROMETHANE	121	75	125
9712227	9712227-10MSD	SW8260A	SD	CIS-1,2-DICHLOROETHENE	119	75	125
9712227	9712227-10MSD	SW8260A	SD	CIS-1,3-DICHLOROPROPENE	109	74	125
9712227	9712227-10MSD	SW8260A	SD	DBROMOCHLOROMETHANE	112	73	125
9712227	9712227-10MSD	SW8260A	SD	DBROMOFLUOROMETHANE	113	75	125
9712227	9712227-10MSD	SW8260A	SD	DBROMOMETHANE	119	69	127
9712227	9712227-10MSD	SW8260A	SD	DICHLORODIFLUOROMETHANE	123	75	125
9712227	9712227-10MSD	SW8260A	SD	ETHYLBENZENE	110	75	125
9712227	9712227-10MSD	SW8260A	SD	HEXACHLOROBUTADIENE	108	75	125
9712227	9712227-10MSD	SW8260A	SD	ISOPROPYL BENZENE	102	75	125
9712227	9712227-10MSD	SW8260A	SD	M,P,XYLENE	105	75	125
9712227	9712227-10MSD	SW8260A	SD	METHYLENE CHLORIDE	62	75	125
9712227	9712227-10MSD	SW8260A	SD	N-BUTYL BENZENE	104	75	125
9712227	9712227-10MSD	SW8260A	SD	N-PROPYLBENZENE	99	75	125
9712227	9712227-10MSD	SW8260A	SD	NAPHTHALENE	89	75	125
9712227	9712227-10MSD	SW8260A	SD	O-XYLENE	107	75	125
9712227	9712227-10MSD	SW8260A	SD	P-ISOPROPYL TOLUENE	98	75	125
9712227	9712227-10MSD	SW8260A	SD	SEC-BUTYL BENZENE	97	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9712227	9712227-10MSD	SW8260A	SD	STYRENE	75	75	125
9712227	9712227-10MSD	SW8260A	SD	TERT-BUTYL BENZENE	93	75	125
9712227	9712227-10MSD	SW8260A	SD	TETRACHLOROETHENE	107	71	125
9712227	9712227-10MSD	SW8260A	SD	TOLUENE	108	74	125
9712227	9712227-10MSD	SW8260A	SD	TOLUENE-D8	110	75	125
9712227	9712227-10MSD	SW8260A	SD	TRANS-1,2-DICHLOROETHENE	119	75	125
9712227	9712227-10MSD	SW8260A	SD	TRANS-1,3-DICHLOROPROPENE	113	66	125
9712227	9712227-10MSD	SW8260A	SD	TRICHLOROETHENE	87	71	125
9712227	9712227-10MSD	SW8260A	SD	TRICHLOROFUROMETHANE	135	67	125
9712227	9712227-10MSD	SW8260A	SD	VINYL CHLORIDE	125	46	134
9712227	VA971230-1LCS	SW8260A	BS	1,1,2-TETRACHLOROETHANE	98	72	125
9712227	VA971230-1LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	104	75	125
9712227	VA971230-1LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	105	74	125
9712227	VA971230-1LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	100	75	127
9712227	VA971230-1LCS	SW8260A	BS	1,1-DICHLOROETHANE	105	72	125
9712227	VA971230-1LCS	SW8260A	BS	1,1,1-DICHLOROETHANE	100	75	125
9712227	VA971230-1LCS	SW8260A	BS	1,1,2,3-TRICHLOROBENZENE	96	75	137
9712227	VA971230-1LCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	94	75	125
9712227	VA971230-1LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	94	75	135

SDG	LabSampleID	Method	QC Type	Analyte	% Recovery	Lower Limit	Upper Limit
9712227	VA971230-1LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	104	75	125
9712227	VA971230-1LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROpane	111	59	125
9712227	VA971230-1LCS	SW8260A	BS	1,2-DIBROMOETHANE	97	75	125
9712227	VA971230-1LCS	SW8260A	BS	1,2-DICHLOROBENZENE	93	75	125
9712227	VA971230-1LCS	SW8260A	BS	1,2-DICHLOROETHANE	115.	68	127
9712227	VA971230-1LCS	SW8260A	BS	1,2-DICHLOROPROPANE	102	70	125
9712227	VA971230-1LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	100	72	112
9712227	VA971230-1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	95	75	125
9712227	VA971230-1LCS	SW8260A	BS	1,3-DICHLOROPROPANE	100	75	125
9712227	VA971230-1LCS	SW8260A	BS	1,4-DICHLOROBENZENE	94	75	125
9712227	VA971230-1LCS	SW8260A	BS	1-CHLOROHEXANE	100	75	125
9712227	VA971230-1LCS	SW8260A	BS	2,2-DICHLOROPROPANE	114	75	125
9712227	VA971230-1LCS	SW8260A	BS	2-CHLOROTOLUENE	104	73	125
9712227	VA971230-1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	103	75	125
9712227	VA971230-1LCS	SW8260A	BS	4-CHLOROTOLUENE	101	74	125
9712227	VA971230-1LCS	SW8260A	BS	BENZENE	98	75	125
9712227	VA971230-1LCS	SW8260A	BS	BROMOBENZENE	98	75	125
9712227	VA971230-1LCS	SW8260A	BS	BROMOCHLOROMETHANE	93	73	125
9712227	VA971230-1LCS	SW8260A	BS	BROMODICHLOROMETHANE	107	75	125
9712227	VA971230-1LCS	SW8260A	BS	BROMOFORM	102	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
971227	VA971230-1LCS	SW8260A	BS	BROMOMETHANE	104	72	125
971227	VA971230-1LCS	SW8260A	BS	CARBON TETRACHLORIDE	111	62	125
971227	VA971230-1LCS	SW8260A	BS	CHLOROBENZENE	100	75	125
971227	VA971230-1LCS	SW8260A	BS	CHLOROETHANE	109	65	125
971227	VA971230-1LCS	SW8260A	BS	CHLOROFORM	100	74	125
971227	VA971230-1LCS	SW8260A	BS	CHLORMETHANE	97	75	125
971227	VA971230-1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	99	75	125
971227	VA971230-1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	107	74	125
971227	VA971230-1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	100	73	125
971227	VA971230-1LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	101	75	125
971227	VA971230-1LCS	SW8260A	BS	DIBROMOMETHANE	110	69	127
971227	VA971230-1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	106	75	125
971227	VA971230-1LCS	SW8260A	BS	ETHYLBENZENE	104	75	125
971227	VA971230-1LCS	SW8260A	BS	HEXACHLOROBUTADIENE	107	75	125
971227	VA971230-1LCS	SW8260A	BS	ISOPROPYLBENZENE	100	75	125
971227	VA971230-1LCS	SW8260A	BS	M,P-XYLENE	106	75	125
971227	VA971230-1LCS	SW8260A	BS	METHYLENE CHLORIDE	71	75	125
971227	VA971230-1LCS	SW8260A	BS	N-BUTYLBENZENE	105	75	125
971227	VA971230-1LCS	SW8260A	BS	N-PROPYLBENZENE	106	75	125
971227	VA971230-1LCS	SW8260A	BS	NAPHTHALENE	86	75	125

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9712227	VA971230-1LCS	SW8260A	BS	O-XYLENE	107	75	125
9712227	VA971230-1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	99	75	125
9712227	VA971230-1LCS	SW8260A	BS	SEC-BUTYL BENZENE	103	75	125
9712227	VA971230-1LCS	SW8260A	BS	STYRENE	101	75	125
9712227	VA971230-1LCS	SW8260A	BS	TERT-BUTYL BENZENE	101	75	125
9712227	VA971230-1LCS	SW8260A	BS	TETRACHLOROETHENE	104	71	125
9712227	VA971230-1LCS	SW8260A	BS	TOLUENE	100	74	125
9712227	VA971230-1LCS	SW8260A	BS	TOLUENE-D ₈	100	75	125
9712227	VA971230-1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	102	75	125
9712227	VA971230-1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	103	66	125
9712227	VA971230-1LCS	SW8260A	BS	TRICHLOROETHENE	100	71	125
9712227	VA971230-1LCS	SW8260A	BS	TRICHLOROFLUOROMETHANE	114	67	125
9712227	VA971230-1LCS	SW8260A	BS	VINYL CHLORIDE	106	46	134
9712240	VA980102-1LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	103	72	125
9712240	VA980102-1LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	112	75	125
9712240	VA980102-1LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	105	74	125
9712240	VA980102-1LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	96	75	127
9712240	VA980102-1LCS	SW8260A	BS	1,1-DICHLOROETHANE	110	72	125
9712240	VA980102-1LCS	SW8260A	BS	1,1-DICHLOROETHENE	112	75	125
9712240	VA980102-1LCS	SW8260A	BS	1,1-DICHLOROPROPENE	109	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9712240	VA980102-1LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	95	75	137
9712240	VA980102-1LCS	SW8260A	BS	1,2,3-TRICHLOROPROpane	88	75	125
9712240	VA980102-1LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	93	75	135
9712240	VA980102-1LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	104	75	125
9712240	VA980102-1LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROPANE	108	59	125
9712240	VA980102-1LCS	SW8260A	BS	1,2-DIBROMOETHANE	102	75	125
9712240	VA980102-1LCS	SW8260A	BS	1,2-DICHLOROBENZENE	94	75	125
9712240	VA980102-1LCS	SW8260A	BS	1,2-DICHLOROETHANE	110	68	127
9712240	VA980102-1LCS	SW8260A	BS	1,2-DICHLOROPROPANE	101	70	125
9712240	VA980102-1LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	102	72	112
9712240	VA980102-1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	91	75	125
9712240	VA980102-1LCS	SW8260A	BS	1,3-DICHLOROPROPANE	106	75	125
9712240	VA980102-1LCS	SW8260A	BS	1,4-DICHLOROBENZENE	85	75	125
9712240	VA980102-1LCS	SW8260A	BS	1-CHLOROHEXANE	109	75	125
9712240	VA980102-1LCS	SW8260A	BS	2,2-DICHLOROPROPANE	114	75	125
9712240	VA980102-1LCS	SW8260A	BS	2-CHLORTOLUENE	107	73	125
9712240	VA980102-1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	109	75	125
9712240	VA980102-1LCS	SW8260A	BS	4-CHLOROTOLUENE	97	74	125
9712240	VA980102-1LCS	SW8260A	BS	BENZENE	101	75	125
9712240	VA980102-1LCS	SW8260A	BS	BROMOBENZENE	112	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9712240	VA980102-1LCS	SW8260A	BS	BROMOCHLOROMETHANE	98	73	125
9712240	VA980102-1LCS	SW8260A	BS	BROMODICHLOROMETHANE	105	75	125
9712240	VA980102-1LCS	SW8260A	BS	BROMOFORM	103	75	125
9712240	VA980102-1LCS	SW8260A	BS	BROMOMETHANE	104	72	125
9712240	VA980102-1LCS	SW8260A	BS	CARBON TETRACHLORIDE	113	62	125
9712240	VA980102-1LCS	SW8260A	BS	CHLOROBENZENE	105	75	125
9712240	VA980102-1LCS	SW8260A	BS	CHLOROETHANE	114	65	125
9712240	VA980102-1LCS	SW8260A	BS	CHLOROFORM	100	74	125
9712240	VA980102-1LCS	SW8260A	BS	CHLOROMETHANE	87	75	125
9712240	VA980102-1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	106	75	125
9712240	VA980102-1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	103	74	125
9712240	VA980102-1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	103	73	125
9712240	VA980102-1LCS	SW8260A	BS	DIBROMOFUOROMETHANE	101	75	125
9712240	VA980102-1LCS	SW8260A	BS	DIBROMOMETHANE	107	69	127
9712240	VA980102-1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	76	75	125
9712240	VA980102-1LCS	SW8260A	BS	ETHYLBENZENE	111	75	125
9712240	VA980102-1LCS	SW8260A	BS	HEXACHLOROBUTADIENE	111	75	125
9712240	VA980102-1LCS	SW8260A	BS	ISOPROPYL BENZENE	101	75	125
9712240	VA980102-1LCS	SW8260A	BS	M,P-XYLENE	117	75	125
9712240	VA980102-1LCS	SW8260A	BS	METHYLENE CHLORIDE	70	75	125

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	%Recovery			<u>Lower Limit</u>	<u>Upper Limit</u>
9712240	VA980102-1LCS	SW8260A	BS	N-BUTYLBENZENE	106	75	125		
9712240	VA980102-1LCS	SW8260A	BS	N-PROPYLBENZENE	102	75	125		
9712240	VA980102-1LCS	SW8260A	BS	NAPHTHALENE	83	75	125		
9712240	VA980102-1LCS	SW8260A	BS	O-XYLENE	112	75	125		
9712240	VA980102-1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	100	75	125		
9712240	VA980102-1LCS	SW8260A	BS	SEC-BUTYL BENZENE	97	75	125		
9712240	VA980102-1LCS	SW8260A	BS	STYRENE	103	75	125		
9712240	VA980102-1LCS	SW8260A	BS	TERT-BUTYL BENZENE	100	75	125		
9712240	VA980102-1LCS	SW8260A	BS	TETRACHLOROETHENE	111	71	125		
9712240	VA980102-1LCS	SW8260A	BS	TOLUENE	97	74	125		
9712240	VA980102-1LCS	SW8260A	BS	TOLUENE-D8	107	75	125		
9712240	VA980102-1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	110	75	125		
9712240	VA980102-1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	104	66	125		
9712240	VA980102-1LCS	SW8260A	BS	TRICHLOROETHENE	105	71	125		
9712240	VA980102-1LCS	SW8260A	BS	TRICHLOROFLUOROMETHANE	124	67	125		
9712240	VA980102-1LCS	SW8260A	BS	VINYL CHLORIDE	102	46	134		
9712254	9712254-2	SW9060	SD	TOTAL ORGANIC CARBON	105				
9712254	AK971230-1	E310.1	BS	TOTAL ALKALINITY	97				
9712254	BR971224-1	SW9056	BS	BROMIDE	98				
9712254	CL971224-1	SW9056	BS	CHLORIDE	99				

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9712254	FL971224-1	SW9056	BS	FLUORIDE	101		
9712254	LCSW1231-003	SW6010A	BS	ALUMINUM	95.4		
9712254	LCSW1231-003	SW6010A	BS	CALCIUM	95.8		
9712254	LCSW1231-003	SW6010A	BS	IRON	90.8		
9712254	LCSW1231-003	SW6010A	BS	LEAD	91.7		
9712254	LCSW1231-003	SW6010A	BS	MAGNESIUM	97.2		
9712254	LCSW1231-003	SW6010A	BS	POTASSIUM	97.9		
9712254	LCSW1231-003	SW6010A	BS	SODIUM	98.4		
9712254	NA971224-1	SW9056	BS	NITRATE	99		
9712254	NI971224-1	SW9056	BS	NITRITE	98		
9712254	PO971224-1	SW9056	BS	ORTHOPHOSPHATE	96		
9712254	SO971224-1	SW9056	BS	SULFATE	98		
9712254	SO971227-1	SW9056	BS	SULFATE	99		
9712254	VA971226-1LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	93	72	125
9712254	VA971226-1LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	111	75	125
9712254	VA971226-1LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	104	74	125
9712254	VA971226-1LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	101	75	127
9712254	VA971226-1LCS	SW8260A	BS	1,1-DICHLOROETHANE	107	72	125
9712254	VA971226-1LCS	SW8260A	BS	1,1-DICHLOROETHENE	105	75	125
9712254	VA971226-1LCS	SW8260A	BS	1,1-DICHLOROPROPENE	106	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9712254	VA971226-1LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	102	75	137
9712254	VA971226-1LCS	SW8260A	BS	1,2,3-TRICHLOROPROpane	95	75	125
9712254	VA971226-1LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	100	75	135
9712254	VA971226-1LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	107	75	125
9712254	VA971226-1LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROpane	117	59	125
9712254	VA971226-1LCS	SW8260A	BS	1,2-DIBROMOETHANE	91	75	125
9712254	VA971226-1LCS	SW8260A	BS	1,2-DICHLOROBENZENE	98	75	125
9712254	VA971226-1LCS	SW8260A	BS	1,2-DICHLOROETHANE	107	68	127
9712254	VA971226-1LCS	SW8260A	BS	1,2-DICHLOROPROpane	104	70	125
9712254	VA971226-1LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	101	72	112
9712254	VA971226-1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	94	75	125
9712254	VA971226-1LCS	SW8260A	BS	1,3-DICHLOROPROpane	102	75	125
9712254	VA971226-1LCS	SW8260A	BS	1,4-DICHLOROBENZENE	95	75	125
9712254	VA971226-1LCS	SW8260A	BS	1-CHLOROHEXANE	97	75	125
9712254	VA971226-1LCS	SW8260A	BS	2,2-DICHLOROPROpane	103	75	125
9712254	VA971226-1LCS	SW8260A	BS	2-CHLOROTOLUENE	103	73	125
9712254	VA971226-1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	104	75	125
9712254	VA971226-1LCS	SW8260A	BS	4-CHLOROTOLUENE	99	74	125
9712254	VA971226-1LCS	SW8260A	BS	BENZENE	100	75	125
9712254	VA971226-1LCS	SW8260A	BS	BROMOBENZENE	110	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9712254	VA971226-1LCS	SW8260A	BS	BROMOCHLOROMETHANE	101	73	125
9712254	VA971226-1LCS	SW8260A	BS	BROMODICHLOROMETHANE	105	75	125
9712254	VA971226-1LCS	SW8260A	BS	BROMOFORM	98	75	125
9712254	VA971226-1LCS	SW8260A	BS	BROMOMETHANE	94	72	125
9712254	VA971226-1LCS	SW8260A	BS	CARBON TETRACHLORIDE	106	62	125
9712254	VA971226-1LCS	SW8260A	BS	CHLOROBENZENE	98	75	125
9712254	VA971226-1LCS	SW8260A	BS	CHLOROETHANE	100	65	125
9712254	VA971226-1LCS	SW8260A	BS	CHLOROFORM	98	74	125
9712254	VA971226-1LCS	SW8260A	BS	CHLORMETHANE	100	75	125
9712254	VA971226-1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	105	75	125
9712254	VA971226-1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	104	74	125
9712254	VA971226-1LCS	SW8260A	BS	DBROMOCHLOROMETHANE	94	73	125
9712254	VA971226-1LCS	SW8260A	BS	DBROMOFLUOROMETHANE	106	75	125
9712254	VA971226-1LCS	SW8260A	BS	DIBROMOMETHANE	109	69	127
9712254	VA971226-1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	102	75	125
9712254	VA971226-1LCS	SW8260A	BS	ETHYLBENZENE	100	75	125
9712254	VA971226-1LCS	SW8260A	BS	HEXACHLOROBUTADIENE	103	75	125
9712254	VA971226-1LCS	SW8260A	BS	ISOPROPYLBENZENE	100	75	125
9712254	VA971226-1LCS	SW8260A	BS	M,P-XYLENE	101	75	125
9712254	VA971226-1LCS	SW8260A	BS	METHYLENE CHLORIDE	76	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9712254	VA971226-1LCS	SW8260A	BS	N-BUTYLBENZENE	104	75	125
9712254	VA971226-1LCS	SW8260A	BS	N-PROPYLBENZENE	108	75	125
9712254	VA971226-1LCS	SW8260A	BS	NAPHTHALENE	98	75	125
9712254	VA971226-1LCS	SW8260A	BS	O-XYLENE	99	75	125
9712254	VA971226-1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	100	75	125
9712254	VA971226-1LCS	SW8260A	BS	SEC-BUTYL BENZENE	99	75	125
9712254	VA971226-1LCS	SW8260A	BS	STYRENE	96	75	125
9712254	VA971226-1LCS	SW8260A	BS	TERT-BUTYL BENZENE	98	75	125
9712254	VA971226-1LCS	SW8260A	BS	TETRACHLOROETHENE	97	71	125
9712254	VA971226-1LCS	SW8260A	BS	TOLUENE	100	74	125
9712254	VA971226-1LCS	SW8260A	BS	TOLUENE-D8	104	75	125
9712254	VA971226-1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	106	75	125
9712254	VA971226-1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	104	66	125
9712254	VA971226-1LCS	SW8260A	BS	TRICHLOROETHENE	102	71	125
9712254	VA971226-1LCS	SW8260A	BS	TRICHLOROFLUOROMETHANE	105	67	125
9712254	VA971226-1LCS	SW8260A	BS	VINYL CHLORIDE	102	46	134
9802049	002MSD	SW9060	SD	TOTAL ORGANIC CARBON	115		
9802049	97LTZ064-MB1BS	SW9060	BS	TOTAL ORGANIC CARBON	102.4		
9802049	97LTZ065-MB1BS	SW9060	BS	TOTAL ORGANIC CARBON	101.4		
9802049	97LTZ67A-MB1BS	SW9060	BS	TOTAL ORGANIC CARBON	98.6		

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	LowerLimit	Upper Limit
9802130	VA980224-LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	101	72	125
9802130	VA980224-LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	101	75	125
9802130	VA980224-LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	109	74	125
9802130	VA980224-LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	104	75	127
9802130	VA980224-LCS	SW8260A	BS	1,1-DICHLOROETHANE	101	72	125
9802130	VA980224-LCS	SW8260A	BS	1,1-DICHLOROETHENE	101	75	125
9802130	VA980224-LCS	SW8260A	BS	1,1-DICHLOROPROPENE	101	75	125
9802130	VA980224-LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	97	75	137
9802130	VA980224-LCS	SW8260A	BS	1,2,3,TRICHLOROPROpane	107	75	125
9802130	VA980224-LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	100	75	135
9802130	VA980224-LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	106	75	125
9802130	VA980224-LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROpane	101	59	125
9802130	VA980224-LCS	SW8260A	BS	1,2-DIBROMOETHANE	102	75	125
9802130	VA980224-LCS	SW8260A	BS	1,2-DICHLOROBENZENE	105	75	125
9802130	VA980224-LCS	SW8260A	BS	1,2-DICHLOROETHANE	108	68	127
9802130	VA980224-LCS	SW8260A	BS	1,2-DICHLOROPROPANE	103	70	125
9802130	VA980224-LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	105	72	112
9802130	VA980224-LCS	SW8260A	BS	1,3-DICHLOROBENZENE	103	75	125
9802130	VA980224-LCS	SW8260A	BS	1,3-DICHLOROPROPANE	103	75	125
9802130	VA980224-LCS	SW8260A	BS	1,4-DICHLOROBENZENE	106	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	LowerLimit	Upper Limit
9802130	VA980224-LCS	SW8260A	BS	1-CHLOROHEXANE	102	75	125
9802130	VA980224-LCS	SW8260A	BS	2,2-DICHLOROPROPANE	97	75	125
9802130	VA980224-LCS	SW8260A	BS	2-CHLOROTOLUENE	102	73	125
9802130	VA980224-LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	101	75	125
9802130	VA980224-LCS	SW8260A	BS	4-CHLOROTOLUENE	107	74	125
9802130	VA980224-LCS	SW8260A	BS	BENZENE	100	75	125
9802130	VA980224-LCS	SW8260A	BS	BROMOBENZENE	106	75	125
9802130	VA980224-LCS	SW8260A	BS	BROMOCHLOROMETHANE	94	73	125
9802130	VA980224-LCS	SW8260A	BS	BROMODICHLOROMETHANE	101	75	125
9802130	VA980224-LCS	SW8260A	BS	BROMOFORM	104	75	125
9802130	VA980224-LCS	SW8260A	BS	BROMOMETHANE	90	72	125
9802130	VA980224-LCS	SW8260A	BS	CARBON TETRACHLORIDE	103	62	125
9802130	VA980224-LCS	SW8260A	BS	CHLOROBENZENE	103	75	125
9802130	VA980224-LCS	SW8260A	BS	CHLOROETHANE	102	65	125
9802130	VA980224-LCS	SW8260A	BS	CHLOROFORM	102	74	125
9802130	VA980224-LCS	SW8260A	BS	CHLOROMETHANE	101	75	125
9802130	VA980224-LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	103	75	125
9802130	VA980224-LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	105	74	125
9802130	VA980224-LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	98	73	125
9802130	VA980224-LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	97	75	125

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9802130	VA980224-LCS	SW8260A	BS	DIBROMOMETHANE	108	69	127
9802130	VA980224-LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	98	75	125
9802130	VA980224-LCS	SW8260A	BS	ETHYLBENZENE	101	75	125
9802130	VA980224-LCS	SW8260A	BS	HEXACHLOROBUTADIENE	112	75	125
9802130	VA980224-LCS	SW8260A	BS	ISOPROPYLBENZENE	102	75	125
9802130	VA980224-LCS	SW8260A	BS	m,p-xylene	100	75	125
9802130	VA980224-LCS	SW8260A	BS	METHYLENE CHLORIDE	59	75	125
9802130	VA980224-LCS	SW8260A	BS	N-BUTYLBENZENE	94	75	125
9802130	VA980224-LCS	SW8260A	BS	N-PROPYLBENZENE	107	75	125
9802130	VA980224-LCS	SW8260A	BS	NAPHTHALENE	103	75	125
9802130	VA980224-LCS	SW8260A	BS	O-XYLENE	102	75	125
9802130	VA980224-LCS	SW8260A	BS,	P-ISOPROPYL TOLUENE	102	75	125
9802130	VA980224-LCS	SW8260A	BS	SEC-BUTYL BENZENE	105	75	125
9802130	VA980224-LCS	SW8260A	BS	STYRENE	102	75	125
9802130	VA980224-LCS	SW8260A	BS	TERT-BUTYL BENZENE	106	75	125
9802130	VA980224-LCS	SW8260A	BS	TETRACHLOROETHENE	100	71	125
9802130	VA980224-LCS	SW8260A	BS	TOLUENE	102	74	125
9802130	VA980224-LCS	SW8260A	BS	TOLUENE-D8	96	75	125
9802130	VA980224-LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	102	75	125
9802130	VA980224-LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	103	66	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9802130	VA980224-LCS	SW8260A	BS	TRICHLOROETHENE	104	71	125
9802130	VA980224-LCS	SW8260A	BS	TRICHLOROFLUOROMETHANE	91	67	125
9802130	VA980224-LCS	SW8260A	BS	VINYL CHLORIDE	99	46	134
9802151	9802151-8MSD	SW8260A	SD	1,1,1,2-TETRACHLOROETHANE	100	72	125
9802151	9802151-8MSD	SW8260A	SD	1,1,1-TRICHLOROETHANE	99	75	125
9802151	9802151-8MSD	SW8260A	SD	1,1,2,2-TETRACHLOROETHANE	107	74	125
9802151	9802151-8MSD	SW8260A	SD	1,1,2-TRICHLOROETHANE	108	75	127
9802151	9802151-8MSD	SW8260A	SD	1,1-DICHLOROETHANE	101	72	125
9802151	9802151-8MSD	SW8260A	SD	1,1-DICHLOROETHENE	104	75	125
9802151	9802151-8MSD	SW8260A	SD	1,1-DICHLOROPROPENE	97	75	125
9802151	9802151-8MSD	SW8260A	SD	1,2,3-TRICHLOROBENZENE	106	75	137
9802151	9802151-8MSD	SW8260A	SD	1,2,3-TRICHLOROPROPANE	103	75	125
9802151	9802151-8MSD	SW8260A	SD	1,2,4-TRICHLOROBENZENE	107	75	135
9802151	9802151-8MSD	SW8260A	SD	1,2,4-TRIMETHYLBENZENE	100	75	125
9802151	9802151-8MSD	SW8260A	SD	1,2-DIBROMO-3-CHLOROPROPA	102	59	125
9802151	9802151-8MSD	SW8260A	SD	1,2-DIBROMOETHANE	98	75	125
9802151	9802151-8MSD	SW8260A	SD	1,2-DICHLOROBENZENE	102	75	125
9802151	9802151-8MSD	SW8260A	SD	1,2-DICHLOROETHANE	108	68	127
9802151	9802151-8MSD	SW8260A	SD	1,2-DICHLOROPROPANE	103	70	125
9802151	9802151-8MSD	SW8260A	SD	1,3,5-TRIMETHYLBENZENE	104	72	112

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9802151	9802151-8MSD	SW8260A	SD	1,3-DICHLOROBENZENE	99	75	125
9802151	9802151-8MSD	SW8260A	SD	1,3-DICHLOROPROpane	99	75	125
9802151	9802151-8MSD	SW8260A	SD	1,4-DICHLOROBENZENE	100	75	125
9802151	9802151-8MSD	SW8260A	SD	1-CHLOROHEXANE	97	75	125
9802151	9802151-8MSD	SW8260A	SD	2,2-DICHLOROPROpane	96	75	125
9802151	9802151-8MSD	SW8260A	SD	2-CHLOROTOLUENE	97	73	125
9802151	9802151-8MSD	SW8260A	SD	4-BROMOFLUOROBENZENE	107	75	125
9802151	9802151-8MSD	SW8260A	SD	4-CHLOROTOLUENE	102	74	125
9802151	9802151-8MSD	SW8260A	SD	BENZENE	93	75	125
9802151	9802151-8MSD	SW8260A	SD	BROMOBENZENE	105	75	125
9802151	9802151-8MSD	SW8260A	SD	BROMOCHLOROMETHANE	96	73	125
9802151	9802151-8MSD	SW8260A	SD	BROMODICHLOROMETHANE	103	75	125
9802151	9802151-8MSD	SW8260A	SD	BROMOFORM	105	75	125
9802151	9802151-8MSD	SW8260A	SD	BROMOMETHANE	87	72	125
9802151	9802151-8MSD	SW8260A	SD	CARBON TETRACHLORIDE	102	62	125
9802151	9802151-8MSD	SW8260A	SD	CHLOROBENZENE	99	75	125
9802151	9802151-8MSD	SW8260A	SD	CHLOROETHANE	100	65	125
9802151	9802151-8MSD	SW8260A	SD	CHLOROFORM	106	74	125
9802151	9802151-8MSD	SW8260A	SD	CHLORMETHANE	97	75	125
9802151	9802151-8MSD	SW8260A	SD	CIS-1,2-DICHLOROETHENE	288	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9802151	9802151-8MSD	SW8260A	SD	CIS-1,3-DICHLOROPROPENE	96	74	125
9802151	9802151-8MSD	SW8260A	SD	DIBROMOCHLOROMETHANE	101	73	125
9802151	9802151-8MSD	SW8260A	SD	DIBROMOFLUOROMETHANE	102	75	125
9802151	9802151-8MSD	SW8260A	SD	DIBROMOMETHANE	105	69	127
9802151	9802151-8MSD	SW8260A	SD	DICHLORODIFLUOROMETHANE	96	75	125
9802151	9802151-8MSD	SW8260A	SD	ETHYLBENZENE	97	75	125
9802151	9802151-8MSD	SW8260A	SD	HEXACHLOROBUTADIENE	100	75	125
9802151	9802151-8MSD	SW8260A	SD	ISOPROPYLBENZENE	100	75	125
9802151	9802151-8MSD	SW8260A	SD	m,p-xylene	98	75	125
9802151	9802151-8MSD	SW8260A	SD	METHYLENE CHLORIDE	32	75	125
9802151	9802151-8MSD	SW8260A	SD	N-BUTYLBENZENE	100	75	125
9802151	9802151-8MSD	SW8260A	SD	N-PROPYLBENZENE	99	75	125
9802151	9802151-8MSD	SW8260A	SD	NAPHTHALENE	102	75	125
9802151	9802151-8MSD	SW8260A	SD	O-XYLENE	95	75	125
9802151	9802151-8MSD	SW8260A	SD	P-ISOPROPYLTOLUENE	101	75	125
9802151	9802151-8MSD	SW8260A	SD	SEC-BUTYLBENZENE	101	75	125
9802151	9802151-8MSD	SW8260A	SD	STYRENE	96	75	125
9802151	9802151-8MSD	SW8260A	SD	TERT-BUTYLBENZENE	97	75	125
9802151	9802151-8MSD	SW8260A	SD	TETRACHLOROETHENE	154	71	125
9802151	9802151-8MSD	SW8260A	SD	TOLUENE	95	74	125

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>			<u>Lower Limit</u>	<u>Upper Limit</u>
9802151	9802151-8-MSD	SW8260A	SD	TOLUENE-D8	100	75	75	125	125
9802151	9802151-8-MSD	SW8260A	SD	TRANS-1,2-DICHLOROETHENE	103	75	75	125	125
9802151	9802151-8-MSD	SW8260A	SD	TRANS-1,3-DICHLOROPROPENE	101	66	66	125	125
9802151	9802151-8-MSD	SW8260A	SD	TRICHLOROETHENE	8938	71	71	125	125
9802151	9802151-8-MSD	SW8260A	SD	TRICHLOROFLUOROMETHANE	101	67	67	125	125
9802151	9802151-8-MSD	SW8260A	SD	VINYL CHLORIDE	103	46	46	134	134
9802151	VA980223-LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	100	72	72	125	125
9802151	VA980223-LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	100	75	75	125	125
9802151	VA980223-LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	93	74	74	125	125
9802151	VA980223-LCS	SW8260A	BS	1,1-TRICHLOROETHANE	97	75	75	127	127
9802151	VA980223-LCS	SW8260A	BS	1,1,2-DICHLOROETHANE	100	72	72	125	125
9802151	VA980223-LCS	SW8260A	BS	1,1-TRICHLOROETHANE	95	75	75	125	125
9802151	VA980223-LCS	SW8260A	BS	1,1-DICHLOROPROPENE	98	75	75	125	125
9802151	VA980223-LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	101	75	75	137	137
9802151	VA980223-LCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	100	75	75	125	125
9802151	VA980223-LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	96	75	75	135	135
9802151	VA980223-LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	98	75	75	125	125
9802151	VA980223-LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROPANE	95	59	59	125	125
9802151	VA980223-LCS	SW8260A	BS	1,2-DIBROMOETHANE	93	75	75	125	125
9802151	VA980223-LCS	SW8260A	BS	1,2-DICHLOROBENZENE	98	75	75	125	125

SDG	LabSampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9802151	VA980223-LCS	SW8260A	BS	1,2-DICHLOROETHANE	99	68	127
9802151	VA980223-LCS	SW8260A	BS	1,2-DICHLOROPROPANE	91	70	125
9802151	VA980223-LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	103	72	112
9802151	VA980223-LCS	SW8260A	BS	1,3-DICHLOROBENZENE	99	75	125
9802151	VA980223-LCS	SW8260A	BS	1,3-DICHLOROPROPANE	96	75	125
9802151	VA980223-LCS	SW8260A	BS	1,4-DICHLOROBENZENE	100	75	125
9802151	VA980223-LCS	SW8260A	BS	1-CHLOROHEXANE	100	75	125
9802151	VA980223-LCS	SW8260A	BS	2,2-DICHLOROPROPANE	101	75	125
9802151	VA980223-LCS	SW8260A	BS	2-CHLOROTOLUENE	101	73	125
9802151	VA980223-LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	97	75	125
9802151	VA980223-LCS	SW8260A	BS	4-CHLOROTOLUENE	101	74	125
9802151	VA980223-LCS	SW8260A	BS	BENZENE	96	75	125
9802151	VA980223-LCS	SW8260A	BS	BROMOBENZENE	103	75	125
9802151	VA980223-LCS	SW8260A	BS	BROMOCHLOROMETHANE	91	73	125
9802151	VA980223-LCS	SW8260A	BS	BROMODICHLOROMETHANE	97	75	125
9802151	VA980223-LCS	SW8260A	BS	BROMOFORM	101	75	125
9802151	VA980223-LCS	SW8260A	BS	BROMOMETHANE	87	72	125
9802151	VA980223-LCS	SW8260A	BS	CARBON TETRACHLORIDE	101	62	125
9802151	VA980223-LCS	SW8260A	BS	CHLOROBENZENE	101	75	125
9802151	VA980223-LCS	SW8260A	BS	CHLOROETHANE	98	65	125

SDG	LabSampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9802151	VA980223-LCS	SW8260A	BS	CHLOROFORM	94	74	125
9802151	VA980223-LCS	SW8260A	BS	CHLORMETHANE	97	75	125
9802151	VA980223-LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	100	75	125
9802151	VA980223-LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	95	74	125
9802151	VA980223-LCS	SW8260A	BS	DBROMOCHLOROMETHANE	96	73	125
9802151	VA980223-LCS	SW8260A	BS	DBROMOFLUOROMETHANE	102	75	125
9802151	VA980223-LCS	SW8260A	BS	DBROMOMETHANE	97	69	127
9802151	VA980223-LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	92	75	125
9802151	VA980223-LCS	SW8260A	BS	ETHYL BENZENE	99	75	125
9802151	VA980223-LCS	SW8260A	BS	HEXA CHLOROBUTADIENE	97	75	125
9802151	VA980223-LCS	SW8260A	BS	ISOPROPYL BENZENE	105	75	125
9802151	VA980223-LCS	SW8260A	BS	m,p-xylene	99	75	125
9802151	VA980223-LCS	SW8260A	BS	METHYLENE CHLORIDE	70	75	125
9802151	VA980223-LCS	SW8260A	BS	N-BUTYL BENZENE	103	75	125
9802151	VA980223-LCS	SW8260A	BS	N-PROPYLBENZENE	105	75	125
9802151	VA980223-LCS	SW8260A	BS	NAPHTHALENE	94	75	125
9802151	VA980223-LCS	SW8260A	BS	O-XYLENE	99	75	125
9802151	VA980223-LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	101	75	125
9802151	VA980223-LCS	SW8260A	BS	SEC-BUTYL BENZENE	100	75	125
9802151	VA980223-LCS	SW8260A	BS	STYRENE	99	75	125

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9804237	VA980511-1LCS	SW8260A	BS	m,p-xylene	80		
9804237	VA980511-1LCS	SW8260A	BS	METHYLENE CHLORIDE	118		
9804237	VA980511-1LCS	SW8260A	BS	N-BUTYLBENZENE	94		
9804237	VA980511-1LCS	SW8260A	BS	N-PROPYLBENZENE	87		
9804237	VA980511-1LCS	SW8260A	BS	NAPHTHALENE	83		
9804237	VA980511-1LCS	SW8260A	BS	O-XYLENE	96		
9804237	VA980511-1LCS	SW8260A	BS	P-ISOPROPYLTOLUENE	88		
9804237	VA980511-1LCS	SW8260A	BS	SEC-BUTYLBENZENE	85		
9804237	VA980511-1LCS	SW8260A	BS	STYRENE	96		
9804237	VA980511-1LCS	SW8260A	BS	TERT-BUTYLBENZENE	91		
9804237	VA980511-1LCS	SW8260A	BS	TETRACHLOROETHENE	95		
9804237	VA980511-1LCS	SW8260A	BS	TOLUENE	95		
9804237	VA980511-1LCS	SW8260A	BS	TOLUENE-D8	98		
9804237	VA980511-1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	96		
9804237	VA980511-1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	96		
9804237	VA980511-1LCS	SW8260A	BS	TRICHLOROETHENE	97		
9804237	VA980511-1LCS	SW8260A	BS	TRICHLOROFLUOROMETHANE	113		
9804237	VA980511-1LCS	SW8260A	BS	VINYL CHLORIDE	107		

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9802151	VA980223-LCS	SW8260A	BS	TERT-BUTYL BENZENE	99	75	125
9802151	VA980223-LCS	SW8260A	BS	TETRACHLOROETHENE	102	71	125
9802151	VA980223-LCS	SW8260A	BS	TOLUENE	96	74	125
9802151	VA980223-LCS	SW8260A	BS	TOLUENE-D ₈	98	75	125
9802151	VA980223-LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	105	75	125
9802151	VA980223-LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	94	66	125
9802151	VA980223-LCS	SW8260A	BS	TRICHLOROETHENE	99	71	125
9802151	VA980223-LCS	SW8260A	BS	TRICHLOROFLUOROMETHANE	94	67	125
9802151	VA980223-LCS	SW8260A	BS	VINYL CHLORIDE	97	46	134
9802151	VA980224-LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	101	72	125
9802151	VA980224-LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	101	75	125
9802151	VA980224-LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	109	74	125
9802151	VA980224-LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	104	75	127
9802151	VA980224-LCS	SW8260A	BS	1,1-DICHLOROETHANE	101	72	125
9802151	VA980224-LCS	SW8260A	BS	1,1,2,3-TRICHLOROBENZENE	101	75	125
9802151	VA980224-LCS	SW8260A	BS	1,1-DICHLOROPROPENE	101	75	125
9802151	VA980224-LCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	107	75	125
9802151	VA980224-LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	100	75	135
9802151	VA980224-LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	106	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9802151	VA980224-LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROpane	101	59	125
9802151	VA980224-LCS	SW8260A	BS	1,2-DIBROMOETHANE	102	75	125
9802151	VA980224-LCS	SW8260A	BS	1,2-DICHLOROBENZENE	105	75	125
9802151	VA980224-LCS	SW8260A	BS	1,2-DICHLOROETHANE	108	68	127
9802151	VA980224-LCS	SW8260A	BS	1,2-DICHLOROPROPANE	103	70	125
9802151	VA980224-LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	105	72	112
9802151	VA980224-LCS	SW8260A	BS	1,3-DICHLOROBENZENE	103	75	125
9802151	VA980224-LCS	SW8260A	BS	1,3-DICHLOROPROPANE	103	75	125
9802151	VA980224-LCS	SW8260A	BS	1,4-DICHLOROBENZENE	106	75	125
9802151	VA980224-LCS	SW8260A	BS	1-CHLOROHEXANE	102	75	125
9802151	VA980224-LCS	SW8260A	BS	2,2-DICHLOROPROPANE	97	75	125
9802151	VA980224-LCS	SW8260A	BS	2-CHLORTOLUENE	102	73	125
9802151	VA980224-LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	101	75	125
9802151	VA980224-LCS	SW8260A	BS	4-CHLOROTOLUENE	107	74	125
9802151	VA980224-LCS	SW8260A	BS	BENZENE	100	75	125
9802151	VA980224-LCS	SW8260A	BS	BROMOBENZENE	106	75	125
9802151	VA980224-LCS	SW8260A	BS	BROMOCHLOROMETHANE	94	73	125
9802151	VA980224-LCS	SW8260A	BS	BROMODICHLOROMETHANE	101	75	125
9802151	VA980224-LCS	SW8260A	BS	BROMOFORM	104	75	125
9802151	VA980224-LCS	SW8260A	BS	BROMOMETHANE	90	72	125

<u>SDG</u>	<u>Lab sampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9802151	VA980224-LCS	SW8260A	BS	CARBON TETRACHLORIDE	103	62	125
9802151	VA980224-LCS	SW8260A	BS	CHLOROBENZENE	103	75	125
9802151	VA980224-LCS	SW8260A	BS	CHLOROETHANE	102	65	125
9802151	VA980224-LCS	SW8260A	BS	CHLOROFORM	102	74	125
9802151	VA980224-LCS	SW8260A	BS	CHLORMETHANE	101	75	125
9802151	VA980224-LCS	SW8260A	BS	CL,S-1,2-DICHLOROETHENE	103	75	125
9802151	VA980224-LCS	SW8260A	BS	CL,S-1,3-DICHLOROPROPENE	105	74	125
9802151	VA980224-LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	98	73	125
9802151	VA980224-LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	97	75	125
9802151	VA980224-LCS	SW8260A	BS	DIBROMOMETHANE	108	69	127
9802151	VA980224-LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	98	75	125
9802151	VA980224-LCS	SW8260A	BS	ETHYL BENZENE	101	75	125
9802151	VA980224-LCS	SW8260A	BS	HEXACHLOROBUTADIENE	112	75	125
9802151	VA980224-LCS	SW8260A	BS	ISOPROPYLBENZENE	102	75	125
9802151	VA980224-LCS	SW8260A	BS	m,p-xylene	100	75	125
9802151	VA980224-LCS	SW8260A	BS	METHYLENE CHLORIDE	59	75	125
9802151	VA980224-LCS	SW8260A	BS	N-BUTYLBENZENE	94	75	125
9802151	VA980224-LCS	SW8260A	BS	N-PROPYLBENZENE	107	75	125
9802151	VA980224-LCS	SW8260A	BS	NAPHTHALENE	103	75	125
9802151	VA980224-LCS	SW8260A	BS	O-XYLENE	102	75	125

SDG	LabSampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9802151	VA980224-LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	102	75	125
9802151	VA980224-LCS	SW8260A	BS	SEC-BUTYL BENZENE	105	75	125
9802151	VA980224-LCS	SW8260A	BS	STYRENE	102	75	125
9802151	VA980224-LCS	SW8260A	BS	TERT-BUTYL BENZENE	106	75	125
9802151	VA980224-LCS	SW8260A	BS	TETRA CHLOROETHENE	100	71	125
9802151	VA980224-LCS	SW8260A	BS	TOLUENE	102	74	125
9802151	VA980224-LCS	SW8260A	BS	TOLUENE-D8	96	75	125
9802151	VA980224-LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	102	75	125
9802151	VA980224-LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	103	66	125
9802151	VA980224-LCS	SW8260A	BS	TRICHLOROETHENE	104	71	125
9802151	VA980224-LCS	SW8260A	BS	TRICHLOROFUOROMETHANE	91	67	125
9802151	VA980224-LCS	SW8260A	BS	VINYL CHLORIDE	99	46	134
9802159	VA980225-LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	100	72	125
9802159	VA980225-LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	105	75	125
9802159	VA980225-LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	97	74	125
9802159	VA980225-LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	104	75	127
9802159	VA980225-LCS	SW8260A	BS	1,1-DICHLOROETHANE	106	72	125
9802159	VA980225-LCS	SW8260A	BS	1,1-DICHLOROETHENE	100	75	125
9802159	VA980225-LCS	SW8260A	BS	1,1-DICHLOROPROPENE	107	75	125
9802159	VA980225-LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	101	75	137

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>LowerLimit</u>	<u>Upper Limit</u>
9802159	VA980225-LCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	94	75	125
9802159	VA980225-LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	98	75	135
9802159	VA980225-LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	100	75	125
9802159	VA980225-LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROPANE	89	59	125
9802159	VA980225-LCS	SW8260A	BS	1,2-DIBROMOETHANE	98	75	125
9802159	VA980225-LCS	SW8260A	BS	1,2-DICHLOROBENZENE	101	75	125
9802159	VA980225-LCS	SW8260A	BS	1,2-DICHLOROETHANE	108	68	127
9802159	VA980225-LCS	SW8260A	BS	1,2-DICHLOROPROPANE	102	70	125
9802159	VA980225-LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	103	72	112
9802159	VA980225-LCS	SW8260A	BS	1,3-DICHLOROBENZENE	96	75	125
9802159	VA980225-LCS	SW8260A	BS	1,3-DICHLOROPROPANE	98	75	125
9802159	VA980225-LCS	SW8260A	BS	1,4-DICHLOROBENZENE	95	75	125
9802159	VA980225-LCS	SW8260A	BS	1-CHLOROHEXANE	105	75	125
9802159	VA980225-LCS	SW8260A	BS	2,2-DICHLOROPROPANE	107	75	125
9802159	VA980225-LCS	SW8260A	BS	2-CHLOROTOLUENE	101	73	125
9802159	VA980225-LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	96	75	125
9802159	VA980225-LCS	SW8260A	BS	4-CHLOROTOLUENE	98	74	125
9802159	VA980225-LCS	SW8260A	BS	BENZENE	103	75	125
9802159	VA980225-LCS	SW8260A	BS	BROMOBENZENE	79	75	125
9802159	VA980225-LCS	SW8260A	BS	BROMOCHLOROMETHANE	96	73	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9802159	VA980225-LCS	SW8260A	BS	BROMODICHLOROMETHANE	99	75	125
9802159	VA980225-LCS	SW8260A	BS	BROMOFORM	102	75	125
9802159	VA980225-LCS	SW8260A	BS	BROMOMETHANE	94	72	125
9802159	VA980225-LCS	SW8260A	BS	CARBON TETRACHLORIDE	108	62	125
9802159	VA980225-LCS	SW8260A	BS	CHLOROBENZENE	104	75	125
9802159	VA980225-LCS	SW8260A	BS	CHLOROETHANE	115	65	125
9802159	VA980225-LCS	SW8260A	BS	CHLORFORM	101	74	125
9802159	VA980225-LCS	SW8260A	BS	CHLORMETHANE	112	75	125
9802159	VA980225-LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	104	75	125
9802159	VA980225-LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	104	74	125
9802159	VA980225-LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	98	73	125
9802159	VA980225-LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	100	75	125
9802159	VA980225-LCS	SW8260A	BS	DIBROMOMETHANE	110	69	127
9802159	VA980225-LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	115	75	125
9802159	VA980225-LCS	SW8260A	BS	ETHYL BENZENE	102	75	125
9802159	VA980225-LCS	SW8260A	BS	HEXACHLOROBUTADIENE	103	75	125
9802159	VA980225-LCS	SW8260A	BS	ISOPROPYL BENZENE	105	75	125
9802159	VA980225-LCS	SW8260A	BS	m,p-xylene	101	75	125
9802159	VA980225-LCS	SW8260A	BS	METHYLENE CHLORIDE	55	75	125
9802159	VA980225-LCS	SW8260A	BS	N-BUTYL BENZENE	106	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9802159	VA980225-LCS	SW8260A	BS	N-PROPYLBENZENE	102	75	125
9802159	VA980225-LCS	SW8260A	BS	NAPHTHALENE	99	75	125
9802159	VA980225-LCS	SW8260A	BS	O-XYLENE	107	75	125
9802159	VA980225-LCS	SW8260A	BS	P-ISOPROPYLtolUENE	101	75	125
9802159	VA980225-LCS	SW8260A	BS	SEC-BUTYLBENZENE	108	75	125
9802159	VA980225-LCS	SW8260A	BS	STYRENE	106	75	125
9802159	VA980225-LCS	SW8260A	BS	TERT-BUTYLBENZENE	103	75	125
9802159	VA980225-LCS	SW8260A	BS	TETRACHLOROETHENE	107	71	125
9802159	VA980225-LCS	SW8260A	BS	TOLUENE	101	74	125
9802159	VA980225-LCS	SW8260A	BS	TOLUENE-D8	102	75	125
9802159	VA980225-LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	106	75	125
9802159	VA980225-LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	99	66	125
9802159	VA980225-LCS	SW8260A	BS	TRICHLOROETHENE	106	71	125
9802159	VA980225-LCS	SW8260A	BS	TRICHLOROFUOROMETHANE	109	67	125
9802159	VA980225-LCS	SW8260A	BS	VINYL CHLORIDE	116	46	134
9802168	9802168-5MSD	SW8260A	SD	1,1,1,2-TETRACHLOROETHANE	109	72	125
9802168	9802168-5MSD	SW8260A	SD	1,1,1-TRICHLOROETHANE	111	75	125
9802168	9802168-5MSD	SW8260A	SD	1,1,2,2-TETRACHLOROETHANE	115	74	125
9802168	9802168-5MSD	SW8260A	SD	1,1,2-TRICHLOROETHANE	112	75	127
9802168	9802168-5MSD	SW8260A	SD	1,1-DICHLOROETHANE	123	72	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9802168	9802168-5MSD	SW8260A	SD	1,1-DICHLOROETHENE	124	75	125
9802168	9802168-5MSD	SW8260A	SD	1,1-DICHLOROPROPENE	109	75	125
9802168	9802168-5MSD	SW8260A	SD	1,2,3-TRICHLOROBENZENE	120	75	137
9802168	9802168-5MSD	SW8260A	SD	1,2,3-TRICHLOROPROPANE	111	75	125
9802168	9802168-5MSD	SW8260A	SD	1,2,4-TRICHLOROBENZENE	113	75	135
9802168	9802168-5MSD	SW8260A	SD	1,2,4-TRIMETHYLBENZENE	112	75	125
9802168	9802168-5MSD	SW8260A	SD	1,2-DIBROMO-3-CHLOROPROPANE	99	59	125
9802168	9802168-5MSD	SW8260A	SD	1,2-DIBROMOETHANE	112	75	125
9802168	9802168-5MSD	SW8260A	SD	1,2-DICHLOROBENZENE	108	75	125
9802168	9802168-5MSD	SW8260A	SD	1,2-DICHLOROETHANE	114	68	127
9802168	9802168-5MSD	SW8260A	SD	1,2-DICHLOROPROPANE	112	70	125
9802168	9802168-5MSD	SW8260A	SD	1,3,5-TRIMETHYLBENZENE	107	72	112
9802168	9802168-5MSD	SW8260A	SD	1,3-DICHLOROBENZENE	103	75	125
9802168	9802168-5MSD	SW8260A	SD	1,3-DICHLOROPROPANE	108	75	125
9802168	9802168-5MSD	SW8260A	SD	1,4-DICHLOROBENZENE	113	75	125
9802168	9802168-5MSD	SW8260A	SD	1-CHLOROHEXANE	111	75	125
9802168	9802168-5MSD	SW8260A	SD	2,2-DICHLOROPROPANE	108	75	125
9802168	9802168-5MSD	SW8260A	SD	2-CHLOROTOLUENE	105	73	125
9802168	9802168-5MSD	SW8260A	SD	4-BROMOFLUOROBENZENE	100	75	125
9802168	9802168-5MSD	SW8260A	SD	4-CHLOROTOLUENE	109	74	125

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9802168	9802168-5MSD	SW8260A	SD	BENZENE	110	75	125
9802168	9802168-5MSD	SW8260A	SD	BROMOBENZENE	107	75	125
9802168	9802168-5MSD	SW8260A	SD	BROMOCHLOROMETHANE	104	73	125
9802168	9802168-5MSD	SW8260A	SD	BROMODICHLOROMETHANE	106	75	125
9802168	9802168-5MSD	SW8260A	SD	BROMOFORM	113	75	125
9802168	9802168-5MSD	SW8260A	SD	BROMOMETHANE	80	72	125
9802168	9802168-5MSD	SW8260A	SD	CARBON TETRACHLORIDE	109	62	125
9802168	9802168-5MSD	SW8260A	SD	CHLOROBENZENE	118	75	125
9802168	9802168-5MSD	SW8260A	SD	CHLOROETHANE	87	65	125
9802168	9802168-5MSD	SW8260A	SD	CHLOROFORM	108	74	125
9802168	9802168-5MSD	SW8260A	SD	CHLORMETHANE	94	75	125
9802168	9802168-5MSD	SW8260A	SD	CIS-1,2-DICHLOROETHENE	1954	75	125
9802168	9802168-5MSD	SW8260A	SD	CIS-1,3-DICHLOROPROPENE	107	74	125
9802168	9802168-5MSD	SW8260A	SD	DIBROMOCHLOROMETHANE	101	73	125
9802168	9802168-5MSD	SW8260A	SD	DIBROMOFLUOROMETHANE	102	75	125
9802168	9802168-5MSD	SW8260A	SD	DIBROMOMETHANE	119	69	127
9802168	9802168-5MSD	SW8260A	SD	DICHLORODIFLUOROMETHANE	76	75	125
9802168	9802168-5MSD	SW8260A	SD	ETHYLBENZENE	115	75	125
9802168	9802168-5MSD	SW8260A	SD	HEXACHLOROBUTADIENE	108	75	125
9802168	9802168-5MSD	SW8260A	SD	ISOPROPYLBENZENE	113	75	125

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>LowerLimit</u>	<u>Upper Limit</u>
9802168	9802168-5MSD	SW8260A	SD	m,p-xylene	111	75	125
9802168	9802168-5MSD	SW8260A	SD	METHYLENE CHLORIDE	48	75	125
9802168	9802168-5MSD	SW8260A	SD	N-BUTYLBENZENE	117	75	125
9802168	9802168-5MSD	SW8260A	SD	N-PROPYLBENZENE	110	75	125
9802168	9802168-5MSD	SW8260A	SD	NAPHTHALENE	186	75	125
9802168	9802168-5MSD	SW8260A	SD	O-XYLENE	115	75	125
9802168	9802168-5MSD	SW8260A	SD	P-ISOPROPYL TOLUENE	110	75	125
9802168	9802168-5MSD	SW8260A	SD	SEC-BUTYL BENZENE	112	75	125
9802168	9802168-5MSD	SW8260A	SD	STYRENE	112	75	125
9802168	9802168-5MSD	SW8260A	SD	TERT-BUTYL BENZENE	108	75	125
9802168	9802168-5MSD	SW8260A	SD	TETRACHLOROETHENE	114	71	125
9802168	9802168-5MSD	SW8260A	SD	TOLUENE	110	74	125
9802168	9802168-5MSD	SW8260A	SD	TOLUENE-D8	100	75	125
9802168	9802168-5MSD	SW8260A	SD	TRANS-1,2-DICHLOROETHENE	2952	75	125
9802168	9802168-5MSD	SW8260A	SD	TRANS-1,3-DICHLOROPROPENE	109	66	125
9802168	9802168-5MSD	SW8260A	SD	TRICHLOROETHENE	871	71	125
9802168	9802168-5MSD	SW8260A	SD	TRICHLOROFLUORMETHANE	84	67	125
9802168	9802168-5MSD	SW8260A	SD	VINYL CHLORIDE	148	46	134
9802168	VA980226-1LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	98	72	125
9802168	VA980226-1LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	106	75	125

SDG	Lab sampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9802168	VA980226-1LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	103	74	125
9802168	VA980226-1LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	98	75	127
9802168	VA980226-1LCS	SW8260A	BS	1,1-DICHLOROETHANE	105	72	125
9802168	VA980226-1LCS	SW8260A	BS	1,1-DICHLOROETHENE	108	75	125
9802168	VA980226-1LCS	SW8260A	BS	1,1-DICHLOROPROPENE	105	75	125
9802168	VA980226-1LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	106	75	137
9802168	VA980226-1LCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	107	75	125
9802168	VA980226-1LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	102	75	135
9802168	VA980226-1LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	115	75	125
9802168	VA980226-1LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROPANE	86	59	125
9802168	VA980226-1LCS	SW8260A	BS	1,2-DIBROMOETHANE	94	75	125
9802168	VA980226-1LCS	SW8260A	BS	1,2-DICHLOROBENZENE	105	75	125
9802168	VA980226-1LCS	SW8260A	BS	1,2-DICHLOROETHANE	100	68	127
9802168	VA980226-1LCS	SW8260A	BS	1,2-DICHLOROPROPANE	102	70	125
9802168	VA980226-1LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	114	72	112
9802168	VA980226-1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	108	75	125
9802168	VA980226-1LCS	SW8260A	BS	1,3-DICHLOROPROPANE	95	75	125
9802168	VA980226-1LCS	SW8260A	BS	1,4-DICHLOROBENZENE	111	75	125
9802168	VA980226-1LCS	SW8260A	BS	1-CHLOROHEXANE	110	75	125
9802168	VA980226-1LCS	SW8260A	BS	2,2-DICHLOROPROPANE	109	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9802168	VA980226-1LCS	SW8260A	BS	2-CHLOROTOLUENE	112	73	125
9802168	VA980226-1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	103	75	125
9802168	VA980226-1LCS	SW8260A	BS	4-CHLOROTOLUENE	112	74	125
9802168	VA980226-1LCS	SW8260A	BS	BENZENE	105	75	125
9802168	VA980226-1LCS	SW8260A	BS	BROMOBENZENE	106	75	125
9802168	VA980226-1LCS	SW8260A	BS	BROMOCHLOROMETHANE	92	73	125
9802168	VA980226-1LCS	SW8260A	BS	BROMODICHLOROMETHANE	98	75	125
9802168	VA980226-1LCS	SW8260A	BS	BROMOFORM	92	75	125
9802168	VA980226-1LCS	SW8260A	BS	BROMOMETHANE	81	72	125
9802168	VA980226-1LCS	SW8260A	BS	CARBON TETRACHLORIDE	107	62	125
9802168	VA980226-1LCS	SW8260A	BS	CHLOROBENZENE	104	75	125
9802168	VA980226-1LCS	SW8260A	BS	CHLOROETHANE	93	65	125
9802168	VA980226-1LCS	SW8260A	BS	CHLOROFORM	99	74	125
9802168	VA980226-1LCS	SW8260A	BS	CHLORMETHANE	90	75	125
9802168	VA980226-1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	110	75	125
9802168	VA980226-1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	100	74	125
9802168	VA980226-1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	97	73	125
9802168	VA980226-1LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	100	75	125
9802168	VA980226-1LCS	SW8260A	BS	DIBROMOMETHANE	99	69	127
9802168	VA980226-1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	83	75	125

SDG	LabSampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9802168	VA980226-1LCS	SW8260A	BS	ETHYLBENZENE	105	75	125
9802168	VA980226-1LCS	SW8260A	BS	HEXACHLOROBUTADIENE	112	75	125
9802168	VA980226-1LCS	SW8260A	BS	ISOPROPYLBENZENE	114	75	125
9802168	VA980226-1LCS	SW8260A	BS	m,p-xylene	107	75	125
9802168	VA980226-1LCS	SW8260A	BS	METHYLENE CHLORIDE	59	75	125
9802168	VA980226-1LCS	SW8260A	BS	N-BUTYLBENZENE	122	75	125
9802168	VA980226-1LCS	SW8260A	BS	N-PROPYLBENZENE	117	75	125
9802168	VA980226-1LCS	SW8260A	BS	NAPHTHALENE	100	75	125
9802168	VA980226-1LCS	SW8260A	BS	O-XYLENE	106	75	125
9802168	VA980226-1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	109	75	125
9802168	VA980226-1LCS	SW8260A	BS	SEC-BUTYL BENZENE	116	75	125
9802168	VA980226-1LCS	SW8260A	BS	STYRENE	106	75	125
9802168	VA980226-1LCS	SW8260A	BS	TERT-BUTYL BENZENE	115	75	125
9802168	VA980226-1LCS	SW8260A	BS	TETRACHLOROETHENE	104	71	125
9802168	VA980226-1LCS	SW8260A	BS	TOLUENE	99	74	125
9802168	VA980226-1LCS	SW8260A	BS	TOLUENE-D8	98	75	125
9802168	VA980226-1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	108	75	125
9802168	VA980226-1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	97	66	125
9802168	VA980226-1LCS	SW8260A	BS	TRICHLOROETHENE	102	71	125
9802168	VA980226-1LCS	SW8260A	BS	TRICHLOROFLUOROMETHANE	83	67	125

SDG	LabSampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9802168	VA980226-1LCS	SW8260A	BS	VINYL CHLORIDE	92	46	134
9802168	VA980302-LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	96	72	125
9802168	VA980302-LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	112	75	125
9802168	VA980302-LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	113	74	125
9802168	VA980302-LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	108	75	127
9802168	VA980302-LCS	SW8260A	BS	1,1-DICHLOROETHANE	119	72	125
9802168	VA980302-LCS	SW8260A	BS	1,1,DICHLOROETHENE	119	75	125
9802168	VA980302-LCS	SW8260A	BS	1,1-DICHLOROPROPENE	109	75	125
9802168	VA980302-LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	108	75	137
9802168	VA980302-LCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	104	75	125
9802168	VA980302-LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	109	75	135
9802168	VA980302-LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	114	75	125
9802168	VA980302-LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROPANE	108	59	125
9802168	VA980302-LCS	SW8260A	BS	1,2-DIBROMOETHANE	98	75	125
9802168	VA980302-LCS	SW8260A	BS	1,2-DICHLOROBENZENE	113	75	125
9802168	VA980302-LCS	SW8260A	BS	1,2-DICHLOROETHANE	104	68	127
9802168	VA980302-LCS	SW8260A	BS	1,2-DICHLOROPROPANE	110	70	125
9802168	VA980302-LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	112	72	112
9802168	VA980302-LCS	SW8260A	BS	1,3-DICHLOROBENZENE	111	75	125
9802168	VA980302-LCS	SW8260A	BS	1,3-DICHLOROPROPANE	99	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	LowerLimit	Upper Limit
9802168	VA980302-LCS	SW8260A	BS	1,4-DICHLOROBENZENE	114	75	125
9802168	VA980302-LCS	SW8260A	BS	1-CHLOROHEXANE	117	75	125
9802168	VA980302-LCS	SW8260A	BS	2,2-DICHLOROPROPANE	109	75	125
9802168	VA980302-LCS	SW8260A	BS	2-CHLOROTOLUENE	104	73	125
9802168	VA980302-LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	101	75	125
9802168	VA980302-LCS	SW8260A	BS	4-CHLOROTOLUENE	121	74	125
9802168	VA980302-LCS	SW8260A	BS	BENZENE	110	75	125
9802168	VA980302-LCS	SW8260A	BS	BROMOBENZENE	107	75	125
9802168	VA980302-LCS	SW8260A	BS	BROMOCHLOROMETHANE	100	73	125
9802168	VA980302-LCS	SW8260A	BS	BROMODICHLOROMETHANE	105	75	125
9802168	VA980302-LCS	SW8260A	BS	BROMOFORM	100	75	125
9802168	VA980302-LCS	SW8260A	BS	BROMOMETHANE	98	72	125
9802168	VA980302-LCS	SW8260A	BS	CARBON TETRACHLORIDE	111	62	125
9802168	VA980302-LCS	SW8260A	BS	CHLOROBENZENE	106	75	125
9802168	VA980302-LCS	SW8260A	BS	CHLOROETHANE	109	65	125
9802168	VA980302-LCS	SW8260A	BS	CHLOROMETHANE	110	75	125
9802168	VA980302-LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	118	75	125
9802168	VA980302-LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	106	74	125
9802168	VA980302-LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	98	73	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9802168	VA980302-LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	104	75	125
9802168	VA980302-LCS	SW8260A	BS	DIBROMOMETHANE	108	69	127
9802168	VA980302-LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	104	75	125
9802168	VA980302-LCS	SW8260A	BS	ETHYLBENZENE	105	75	125
9802168	VA980302-LCS	SW8260A	BS	HEXACHLOROBUTADIENE	110	75	125
9802168	VA980302-LCS	SW8260A	BS	ISOPROPYLBENZENE	121	75	125
9802168	VA980302-LCS	SW8260A	BS	m,p-xylene	93	75	125
9802168	VA980302-LCS	SW8260A	BS	METHYLENE CHLORIDE	57	75	125
9802168	VA980302-LCS	SW8260A	BS	N-BUTYLBENZENE	126	75	125
9802168	VA980302-LCS	SW8260A	BS	N-PROPYLBENZENE	117	75	125
9802168	VA980302-LCS	SW8260A	BS	NAPHTHALENE	124	75	125
9802168	VA980302-LCS	SW8260A	BS	O-XYLENE	104	75	125
9802168	VA980302-LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	117	75	125
9802168	VA980302-LCS	SW8260A	BS	SEC-BUTYL BENZENE	122	75	125
9802168	VA980302-LCS	SW8260A	BS	STYRENE	102	75	125
9802168	VA980302-LCS	SW8260A	BS	TERT-BUTYL BENZENE	115	75	125
9802168	VA980302-LCS	SW8260A	BS	TETRACHLOROETHENE	102	71	125
9802168	VA980302-LCS	SW8260A	BS	TOLUENE	109	74	125
9802168	VA980302-LCS	SW8260A	BS	TOLUENE-D8	102	75	125
9802168	VA980302-LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	119	75	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9802168	VA980302-LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	108	66	125
9802168	VA980302-LCS	SW8260A	BS	TRICHLOROETHENE	109	71	125
9802168	VA980302-LCS	SW8260A	BS	TRICHLOROFUOROMETHANE	99	67	125
9802168	VA980302-LCS	SW8260A	BS	VINYL CHLORIDE	107	46	134
9802180	VA980302-LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	96	72	125
9802180	VA980302-LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	112	75	125
9802180	VA980302-LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	113	74	125
9802180	VA980302-LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	108	75	127
9802180	VA980302-LCS	SW8260A	BS	1,1-DICHLOROETHANE	119	72	125
9802180	VA980302-LCS	SW8260A	BS	1,1-DICHLOROETHENE	119	75	125
9802180	VA980302-LCS	SW8260A	BS	1,1-DICHLOROPROPENE	109	75	125
9802180	VA980302-LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	108	75	137
9802180	VA980302-LCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	104	75	125
9802180	VA980302-LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	109	75	135
9802180	VA980302-LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	114	75	125
9802180	VA980302-LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROPANE	108	59	125
9802180	VA980302-LCS	SW8260A	BS	1,2-DIBROMOETHANE	98	75	125
9802180	VA980302-LCS	SW8260A	BS	1,2-DICHLOROBENZENE	113	75	125
9802180	VA980302-LCS	SW8260A	BS	1,2-DICHLOROETHANE	104	68	127
9802180	VA980302-LCS	SW8260A	BS	1,2-DICHLOROPROPANE	110	70	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9802180	VA980302-LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	112	72	112
9802180	VA980302-LCS	SW8260A	BS	1,3-DICHLOROBENZENE	111	75	125
9802180	VA980302-LCS	SW8260A	BS	1,3-DICHLOROPROpane	99	75	125
9802180	VA980302-LCS	SW8260A	BS	1,4-DICHLOROBENZENE	114	75	125
9802180	VA980302-LCS	SW8260A	BS	1-CHLOROHEXANE	117	75	125
9802180	VA980302-LCS	SW8260A	BS	2,2-DICHLOROPROPANE	109	75	125
9802180	VA980302-LCS	SW8260A	BS	2-CHLOROTOLUENE	104	73	125
9802180	VA980302-LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	101	75	125
9802180	VA980302-LCS	SW8260A	BS	4-CHLOROTOLUENE	121	74	125
9802180	VA980302-LCS	SW8260A	BS	BENZENE	110	75	125
9802180	VA980302-LCS	SW8260A	BS	BROMOBENZENE	107	75	125
9802180	VA980302-LCS	SW8260A	BS	BROMOCHLOROMETHANE	100	73	125
9802180	VA980302-LCS	SW8260A	BS	BROMODICHLOROMETHANE	105	75	125
9802180	VA980302-LCS	SW8260A	BS	BROMOFORM	100	75	125
9802180	VA980302-LCS	SW8260A	BS	BROMOMETHANE	98	72	125
9802180	VA980302-LCS	SW8260A	BS	CARBON TETRACHLORIDE	111	62	125
9802180	VA980302-LCS	SW8260A	BS	CHLOROBENZENE	106	75	125
9802180	VA980302-LCS	SW8260A	BS	CHLOROETHANE	109	65	125
9802180	VA980302-LCS	SW8260A	BS	CHLOROFORM	107	74	125
9802180	VA980302-LCS	SW8260A	BS	CHLORMETHANE	110	75	125

SDG	LabSampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9802180	VA980302-LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	118	75	125
9802180	VA980302-LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	106	74	125
9802180	VA980302-LCS	SW8260A	BS	DBROMOCHLOROMETHANE	98	73	125
9802180	VA980302-LCS	SW8260A	BS	DBROMOFLUOROMETHANE	104	75	125
9802180	VA980302-LCS	SW8260A	BS	DBROMOMETHANE	108	69	127
9802180	VA980302-LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	104	75	125
9802180	VA980302-LCS	SW8260A	BS	ETHYL BENZENE	105	75	125
9802180	VA980302-LCS	SW8260A	BS	HEXA CHLOROBUTADIENE	110	75	125
9802180	VA980302-LCS	SW8260A	BS	ISOPROPYL BENZENE	121	75	125
9802180	VA980302-LCS	SW8260A	BS	m,p-xylene	93	75	125
9802180	VA980302-LCS	SW8260A	BS	METHYLENE CHLORIDE	57	75	125
9802180	VA980302-LCS	SW8260A	BS	N-BUTYL BENZENE	126	75	125
9802180	VA980302-LCS	SW8260A	BS	N-PROPYLBENZENE	117	75	125
9802180	VA980302-LCS	SW8260A	BS	NAPHTHALENE	124	75	125
9802180	VA980302-LCS	SW8260A	BS	O-XYLENE	104	75	125
9802180	VA980302-LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	117	75	125
9802180	VA980302-LCS	SW8260A	BS	SEC-BUTYL BENZENE	122	75	125
9802180	VA980302-LCS	SW8260A	BS	STYRENE	102	75	125
9802180	VA980302-LCS	SW8260A	BS	TERT-BUTYL BENZENE	115	75	125
9802180	VA980302-LCS	SW8260A	BS	TETRACHLOROETHENE	102	71	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9802180	VA980302-LCS	SW8260A	BS	TOLUENE	109	74	125
9802180	VA980302-LCS	SW8260A	BS	TOLUENE-D8	102	75	125
9802180	VA980302-LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	119	75	125
9802180	VA980302-LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	108	66	125
9802180	VA980302-LCS	SW8260A	BS	TRICHLOROETHENE	109	71	125
9802180	VA980302-LCS	SW8260A	BS	TRICHLOROFLUOROMETHANE	99	67	125
9802180	VA980302-LCS	SW8260A	BS	VINYL CHLORIDE	107	46	134
9804159	VA980429-1LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	95	72	125
9804159	VA980429-1LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	99	75	125
9804159	VA980429-1LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	97	74	125
9804159	VA980429-1LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	78	75	127
9804159	VA980429-1LCS	SW8260A	BS	1,1-DICHLOROETHANE	95	72	125
9804159	VA980429-1LCS	SW8260A	BS	1,1,2,3-TRICHLOROBENZENE	101	75	125
9804159	VA980429-1LCS	SW8260A	BS	1,1-DICHLOROPROPENE	103	75	125
9804159	VA980429-1LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	88	75	137
9804159	VA980429-1LCS	SW8260A	BS	1,2,3-TRICHLOROPROPENE	91	75	125
9804159	VA980429-1LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	88	75	135
9804159	VA980429-1LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	108	75	125
9804159	VA980429-1LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROPANE	105	59	125
9804159	VA980429-1LCS	SW8260A	BS	1,2-DIBROMOETHANE	89	75	125

SDG	LabSampleID	Method	QC Type	Analyte	% Recovery	Lower Limit	Upper Limit
9804159	VA980429-1LCS	SW8260A	BS	1,2-DICHLOROBENZENE	93	75	125
9804159	VA980429-1LCS	SW8260A	BS	1,2-DICHLOROETHANE	92	68	127
9804159	VA980429-1LCS	SW8260A	BS	1,2-DICHLOROETHANE-D4	89	62	139
9804159	VA980429-1LCS	SW8260A	BS	1,2-DICHLOROPROpane	93	70	125
9804159	VA980429-1LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	115	72	112
9804159	VA980429-1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	101	75	125
9804159	VA980429-1LCS	SW8260A	BS	1,3-DICHLOROPROpane	84	75	125
9804159	VA980429-1LCS	SW8260A	BS	1,4-DICHLOROBENZENE	92	75	125
9804159	VA980429-1LCS	SW8260A	BS	1-CHLOROHEXANE	126	75	125
9804159	VA980429-1LCS	SW8260A	BS	2,2-DICHLOROPROpane	107	75	125
9804159	VA980429-1LCS	SW8260A	BS	2-CHLOROTOLUENE	99	73	125
9804159	VA980429-1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	100	75	125
9804159	VA980429-1LCS	SW8260A	BS	4-CHLOROTOLUENE	99	74	125
9804159	VA980429-1LCS	SW8260A	BS	BENZENE	94	75	125
9804159	VA980429-1LCS	SW8260A	BS	BROMOBENZENE	98	75	125
9804159	VA980429-1LCS	SW8260A	BS	BROMOCHLOROMETHANE	87	73	125
9804159	VA980429-1LCS	SW8260A	BS	BROMODICHLOROMETHANE	91	75	125
9804159	VA980429-1LCS	SW8260A	BS	BROMOFORM	85	75	125
9804159	VA980429-1LCS	SW8260A	BS	BROMOMETHANE	100	72	125
9804159	VA980429-1LCS	SW8260A	BS	CARBON TETRACHLORIDE	105	62	125

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9804159	VA980429-1LCS	SW8260A	BS	CHLOROBENZENE	96	75	125
9804159	VA980429-1LCS	SW8260A	BS	CHLOROETHANE	117	65	125
9804159	VA980429-1LCS	SW8260A	BS	CHLOROFORM	91	74	125
9804159	VA980429-1LCS	SW8260A	BS	CHLOROMETHANE	103	75	125
9804159	VA980429-1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	94	75	125
9804159	VA980429-1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	86	74	125
9804159	VA980429-1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	88	73	125
9804159	VA980429-1LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	93	75	125
9804159	VA980429-1LCS	SW8260A	BS	DIBROMOMETHANE	90	69	127
9804159	VA980429-1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	94	75	125
9804159	VA980429-1LCS	SW8260A	BS	ETHYL BENZENE	99	75	125
9804159	VA980429-1LCS	SW8260A	BS	HEXACHLOROBUTADIENE	109	75	125
9804159	VA980429-1LCS	SW8260A	BS	ISOPROPYLBENZENE	115	75	125
9804159	VA980429-1LCS	SW8260A	BS	M,p-XYLENE	97		
9804159	VA980429-1LCS	SW8260A	BS	m,p-xylene	97		
9804159	VA980429-1LCS	SW8260A	BS	METHYLENE CHLORIDE	73	75	125
9804159	VA980429-1LCS	SW8260A	BS	N-BUTYL BENZENE	103	75	125
9804159	VA980429-1LCS	SW8260A	BS	N-PROPYLBENZENE	106	75	125
9804159	VA980429-1LCS	SW8260A	BS	NAPHTHALENE	84	75	125
9804159	VA980429-1LCS	SW8260A	BS	O-XYLENE	99	75	125

SDG	Lab sampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9804159	VA980429-1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	107	75	125
9804159	VA980429-1LCS	SW8260A	BS	SEC-BUTYL BENZENE	118	75	125
9804159	VA980429-1LCS	SW8260A	BS	STYRENE	95	75	125
9804159	VA980429-1LCS	SW8260A	BS	TERT-BUTYL BENZENE	112	75	125
9804159	VA980429-1LCS	SW8260A	BS	TETRACHLOROETHENE	108	71	125
9804159	VA980429-1LCS	SW8260A	BS	TOLUENE	94	74	125
9804159	VA980429-1LCS	SW8260A	BS	TOLUENE-D8	97	75	125
9804159	VA980429-1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	96	75	125
9804159	VA980429-1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	85	66	125
9804159	VA980429-1LCS	SW8260A	BS	TRICHLOROETHENE	97	71	125
9804159	VA980429-1LCS	SW8260A	BS	TRICHLOROFLUOROMETHANE	107	67	125
9804159	VA980429-1LCS	SW8260A	BS	VINYL CHLORIDE	111	46	134
9804181	9804181-9MSD	SW8260A	SD	1,1,1,2-TETRACHLOROETHANE	89		
9804181	9804181-9MSD	SW8260A	SD	1,1,1-TRICHLOROETHANE	92		
9804181	9804181-9MSD	SW8260A	SD	1,1,2,2-TETRACHLOROETHANE	95		
9804181	9804181-9MSD	SW8260A	SD	1,1,2-TRICHLOROETHANE	98		
9804181	9804181-9MSD	SW8260A	SD	1,1-DICHLOROETHANE	87		
9804181	9804181-9MSD	SW8260A	SD	1,1-DICHLOROETHENE	93		
9804181	9804181-9MSD	SW8260A	SD	1,1-DICHLOROPROPENE	84		
9804181	9804181-9MSD	SW8260A	SD	1,2,3-TRICHLOROBENZENE	81		

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9804181	9804181-9MSD	SW8260A	SD	1,2,3-TRICHLOROPROPANE	89		
9804181	9804181-9MSD	SW8260A	SD	1,2,4-TRICHLOROBENZENE	83		
9804181	9804181-9MSD	SW8260A	SD	1,2,4-TRIMETHYLBENZENE	78		
9804181	9804181-9MSD	SW8260A	SD	1,2-DIBROMO-3-CHLOROPROPANE	98		
9804181	9804181-9MSD	SW8260A	SD	1,2-DIBROMOETHANE	91		
9804181	9804181-9MSD	SW8260A	SD	1,2-DICHLOROBENZENE	79		
9804181	9804181-9MSD	SW8260A	SD	1,2-DICHLOROETHANE	105		
9804181	9804181-9MSD	SW8260A	SD	1,2-DICHLOROETHANE-D4	108		
9804181	9804181-9MSD	SW8260A	SD	1,2-DICHLOROPROPANE	85		
9804181	9804181-9MSD	SW8260A	SD	1,3,5-TRIMETHYLBENZENE	80		
9804181	9804181-9MSD	SW8260A	SD	1,3-DICHLOROBENZENE	77		
9804181	9804181-9MSD	SW8260A	SD	1,3-DICHLOROPROPANE	91		
9804181	9804181-9MSD	SW8260A	SD	1,4-DICHLOROBENZENE	78		
9804181	9804181-9MSD	SW8260A	SD	1-CHLOROHEXANE	95		
9804181	9804181-9MSD	SW8260A	SD	2,2-DICHLOROPROPANE	83		
9804181	9804181-9MSD	SW8260A	SD	2-CHLOROTOLUENE	79		
9804181	9804181-9MSD	SW8260A	SD	4-BROMOFLUOROBENZENE	97		
9804181	9804181-9MSD	SW8260A	SD	4-CHLOROTOLUENE	80		
9804181	9804181-9MSD	SW8260A	SD	BENZENE	85		
9804181	9804181-9MSD	SW8260A	SD	BROMOBENZENE	84		

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9804181	9804181-9MSD	SW8260A	SD	BROMOCHLOROMETHANE	91		
9804181	9804181-9MSD	SW8260A	SD	BROMODICHLOROMETHANE	90		
9804181	9804181-9MSD	SW8260A	SD	BROMOFORM	95		
9804181	9804181-9MSD	SW8260A	SD	BROMOMETHANE	84		
9804181	9804181-9MSD	SW8260A	SD	CARBON TETRACHLORIDE	90		
9804181	9804181-9MSD	SW8260A	SD	CHLOROBENZENE	91		
9804181	9804181-9MSD	SW8260A	SD	CHLOROETHANE	104		
9804181	9804181-9MSD	SW8260A	SD	CHLOROFORM	103		
9804181	9804181-9MSD	SW8260A	SD	CHLOROMETHANE	96		
9804181	9804181-9MSD	SW8260A	SD	CIS-1,2-DICHLOROETHENE	258		
9804181	9804181-9MSD	SW8260A	SD	CIS-1,3-DICHLOROPROPENE	86		
9804181	9804181-9MSD	SW8260A	SD	DIBROMOCHLOROMETHANE	89		
9804181	9804181-9MSD	SW8260A	SD	DIBROMOFLUOROMETHANE	100		
9804181	9804181-9MSD	SW8260A	SD	DIBROMOMETHANE	96		
9804181	9804181-9MSD	SW8260A	SD	DICHLORODIFLUOROMETHANE	84		
9804181	9804181-9MSD	SW8260A	SD	ETHYL BENZENE	86		
9804181	9804181-9MSD	SW8260A	SD	HEXACHLOROBUTADIENE	80		
9804181	9804181-9MSD	SW8260A	SD	ISOPROPYL BENZENE	78		
9804181	9804181-9MSD	SW8260A	SD	m,p-xylene	83		
9804181	9804181-9MSD	SW8260A	SD	METHYLENE CHLORIDE	53		

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9804181	9804181-9MSD	SW8260A	SD	N-BUTYLBENZENE	76		
9804181	9804181-9MSD	SW8260A	SD	N-PROPYLBENZENE	75		
9804181	9804181-9MSD	SW8260A	SD	NAPHTHALENE	78		
9804181	9804181-9MSD	SW8260A	SD	O-XYLENE	85		
9804181	9804181-9MSD	SW8260A	SD	P-ISOPROPYL TOLUENE	76		
9804181	9804181-9MSD	SW8260A	SD	SEC-BUTYL BENZENE	81		
9804181	9804181-9MSD	SW8260A	SD	STYRENE	80		
9804181	9804181-9MSD	SW8260A	SD	TERT-BUTYL BENZENE	77		
9804181	9804181-9MSD	SW8260A	SD	TETRACHLOROETHENE	141		
9804181	9804181-9MSD	SW8260A	SD	TOLUENE	82		
9804181	9804181-9MSD	SW8260A	SD	TOLUENE-D8	98		
9804181	9804181-9MSD	SW8260A	SD	TRANS-1,2-DICHLOROETHENE	91		
9804181	9804181-9MSD	SW8260A	SD	TRANS-1,3-DICHLOROPROPENE	88		
9804181	9804181-9MSD	SW8260A	SD	TRICHLOROETHENE	7519		
9804181	9804181-9MSD	SW8260A	SD	TRICHLOROFLUOROMETHANE	106		
9804181	9804181-9MSD	SW8260A	SD	VINYL CHLORIDE	98		
9804181	VA980428-1LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	84		
9804181	VA980428-1LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	87		
9804181	VA980428-1LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	96		
9804181	VA980428-1LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	83		

<u>SDG</u>	<u>LabSampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>LowerLimit</u>	<u>Upper Limit</u>
9804181	VA980428-1LCS	SW8260A	BS	1,1-DICHLOROETHANE	88		
9804181	VA980428-1LCS	SW8260A	BS	1,1-DICHLOROETHENE	86		
9804181	VA980428-1LCS	SW8260A	BS	1,1-DICHLOROPROPENE	85		
9804181	VA980428-1LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	84		
9804181	VA980428-1LCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	92		
9804181	VA980428-1LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	84		
9804181	VA980428-1LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	89		
9804181	VA980428-1LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROPANE	102		
9804181	VA980428-1LCS	SW8260A	BS	1,2-DIBROMOETHANE	85		
9804181	VA980428-1LCS	SW8260A	BS	1,2-DICHLOROBENZENE	84		
9804181	VA980428-1LCS	SW8260A	BS	1,2-DICHLOROETHANE	89		
9804181	VA980428-1LCS	SW8260A	BS	1,2-DICHLOROETHANE-D4	97		
9804181	VA980428-1LCS	SW8260A	BS	1,2-DICHLOROPROPANE	81		
9804181	VA980428-1LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	91		
9804181	VA980428-1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	87		
9804181	VA980428-1LCS	SW8260A	BS	1,3-DICHLOROPROPANE	83		
9804181	VA980428-1LCS	SW8260A	BS	1,4-DICHLOROBENZENE	86		
9804181	VA980428-1LCS	SW8260A	BS	1-CHLOROHEXANE	96		
9804181	VA980428-1LCS	SW8260A	BS	2,2-DICHLOROPROPANE	89		
9804181	VA980428-1LCS	SW8260A	BS	2-CHLOROTOLUENE	84		

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9804181	VA980428-1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	98		
9804181	VA980428-1LCS	SW8260A	BS	4-CHLOROTOLUENE	86		
9804181	VA980428-1LCS	SW8260A	BS	BENZENE	85		
9804181	VA980428-1LCS	SW8260A	BS	BROMOBENZENE	89		
9804181	VA980428-1LCS	SW8260A	BS	BROMOCHLOROMETHANE	83		
9804181	VA980428-1LCS	SW8260A	BS	BROMODICHLOROMETHANE	86		
9804181	VA980428-1LCS	SW8260A	BS	BROMOFORM	83		
9804181	VA980428-1LCS	SW8260A	BS	BROMOMETHANE	90		
9804181	VA980428-1LCS	SW8260A	BS	CARBON TETRACHLORIDE	86		
9804181	VA980428-1LCS	SW8260A	BS	CHLOROBENZENE	84		
9804181	VA980428-1LCS	SW8260A	BS	CHLOROETHANE	103		
9804181	VA980428-1LCS	SW8260A	BS	CHLOROFORM	86		
9804181	VA980428-1LCS	SW8260A	BS	CHLOROMETHANE	96		
9804181	VA980428-1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	87		
9804181	VA980428-1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	81		
9804181	VA980428-1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	83		
9804181	VA980428-1LCS	SW8260A	BS	DIBROMOMETHANE	91		
9804181	VA980428-1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	87		
9804181	VA980428-1LCS	SW8260A	BS	ETHYL BENZENE	81		

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9804181	VA980428-1LCS	SW8260A	BS	HEXACHLOROBUTADIENE	88		
9804181	VA980428-1LCS	SW8260A	BS	ISOPROPYLBENZENE	88		
9804181	VA980428-1LCS	SW8260A	BS	m,p-xylene	82		
9804181	VA980428-1LCS	SW8260A	BS	METHYLENE CHLORIDE	75		
9804181	VA980428-1LCS	SW8260A	BS	N-BUTYLBENZENE	83		
9804181	VA980428-1LCS	SW8260A	BS	N-PROPYLBENZENE	89		
9804181	VA980428-1LCS	SW8260A	BS	NAPHTHALENE	79		
9804181	VA980428-1LCS	SW8260A	BS	O-XYLENE	80		
9804181	VA980428-1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	89		
9804181	VA980428-1LCS	SW8260A	BS	SEC-BUTYLBENZENE	88		
9804181	VA980428-1LCS	SW8260A	BS	STYRENE	82		
9804181	VA980428-1LCS	SW8260A	BS	TERT-BUTYL BENZENE	87		
9804181	VA980428-1LCS	SW8260A	BS	TETRACHLOROETHENE	84		
9804181	VA980428-1LCS	SW8260A	BS	TOLUENE	80		
9804181	VA980428-1LCS	SW8260A	BS	TOLUENE-D8	99		
9804181	VA980428-1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	86		
9804181	VA980428-1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	82		
9804181	VA980428-1LCS	SW8260A	BS	TRICHLOROETHENE	78		
9804181	VA980428-1LCS	SW8260A	BS	TRICHLOROFUROMETHANE	97		
9804181	VA980428-1LCS	SW8260A	BS	VINYL CHLORIDE	100		

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9804186	9804186-5	SW9056	SD	BROMIDE	93		
9804186	9804186-5	SW9056	SD	CHLORIDE	94		
9804186	9804186-5	SW9056	SD	FLUORIDE	96		
9804186	9804186-5	SW9056	SD	NITRATE	91		
9804186	9804186-5	SW9056	SD	NITRITE	108		
9804186	9804186-5	SW9056	SD	ORTHOPHOSPHATE	100		
9804186	9804186-5	SW9056	SD	SULFATE	95		
9804186	9804186-5	SW9060	SD	TOTAL ORGANIC CARBON	99		
9804186	9804186-5MSD	SW6010B	SD	ALUMINUM			
9804186	9804186-5MSD	SW6010B	SD	CALCIUM			
9804186	9804186-5MSD	SW6010B	SD	IRON			
9804186	9804186-5MSD	SW6010B	SD	LEAD			
9804186	9804186-5MSD	SW6010B	SD	MAGNESIUM			
9804186	9804186-5MSD	SW6010B	SD	POTASSIUM			
9804186	9804186-5MSD	SW6010B	SD	SODIUM			
9804186	9804186-5MSD	SW8260A	SD	1,1,1,2-TETRACHLOROETHANE	89		
9804186	9804186-5MSD	SW8260A	SD	1,1,1-TRICHLOROETHANE	107		
9804186	9804186-5MSD	SW8260A	SD	1,1,2,2-TETRACHLOROETHANE	98		
9804186	9804186-5MSD	SW8260A	SD	1,1,2-TRICHLOROETHANE	102		
9804186	9804186-5MSD	SW8260A	SD	1,1-DICHLOROETHANE	102		

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9804186	9804186-5MSD	SW8260A	SD	1,1-DICHLOROETHENE	136		
9804186	9804186-5MSD	SW8260A	SD	1,1-DICHLOROPROPENE	104		
9804186	9804186-5MSD	SW8260A	SD	1,2,3-TRICHLOROBENZENE	91		
9804186	9804186-5MSD	SW8260A	SD	1,2,3-TRICHLOROPROPANE	96		
9804186	9804186-5MSD	SW8260A	SD	1,2,4-TRICHLOROBENZENE	91		
9804186	9804186-5MSD	SW8260A	SD	1,2,4-TRIMETHYLBENZENE	104		
9804186	9804186-5MSD	SW8260A	SD	1,2-DIBROMO-3-CHLOROPROPANE	103		
9804186	9804186-5MSD	SW8260A	SD	1,2-DIBROMOETHANE	89		
9804186	9804186-5MSD	SW8260A	SD	1,2-DICHLOROBENZENE	93		
9804186	9804186-5MSD	SW8260A	SD	1,2-DICHLOROETHANE	108		
9804186	9804186-5MSD	SW8260A	SD	1,2-DICHLOROETHANE-D4	99		
9804186	9804186-5MSD	SW8260A	SD	1,2,5-TRIMETHYLBENZENE	106		
9804186	9804186-5MSD	SW8260A	SD	1,3-DICHLOROBENZENE	97		
9804186	9804186-5MSD	SW8260A	SD	1,3-DICHLOROPROPANE	98		
9804186	9804186-5MSD	SW8260A	SD	1,4-DICHLOROBENZENE	87		
9804186	9804186-5MSD	SW8260A	SD	1-CHLOROHEXANE	113		
9804186	9804186-5MSD	SW8260A	SD	2,2-DICHLOROPROPANE	94		
9804186	9804186-5MSD	SW8260A	SD	2-CHLOROTOLUENE	98		
9804186	9804186-5MSD	SW8260A	SD	4-BROMOFLUOROBENZENE	104		

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9804186	9804186-5MSD	SW8260A	SD	4-CHLORTOLUENE	97		
9804186	9804186-5MSD	SW8260A	SD	BENZENE	106		
9804186	9804186-5MSD	SW8260A	SD	BROMOBENZENE	97		
9804186	9804186-5MSD	SW8260A	SD	BROMOCHLOROMETHANE	96		
9804186	9804186-5MSD	SW8260A	SD	BROMODICHLOROMETHANE	101		
9804186	9804186-5MSD	SW8260A	SD	BROMOFORM	91		
9804186	9804186-5MSD	SW8260A	SD	BROMOMETHANE	102		
9804186	9804186-5MSD	SW8260A	SD	CARBON TETRACHLORIDE	107		
9804186	9804186-5MSD	SW8260A	SD	CHLOROBENZENE	99		
9804186	9804186-5MSD	SW8260A	SD	CHLOROETHANE	120		
9804186	9804186-5MSD	SW8260A	SD	CHLOROFORM	102		
9804186	9804186-5MSD	SW8260A	SD	CHLORMETHANE	113		
9804186	9804186-5MSD	SW8260A	SD	CIS-1,2-DICHLOROETHENE	3314		
9804186	9804186-5MSD	SW8260A	SD	CIS-1,3-DICHLOROPROPENE	96		
9804186	9804186-5MSD	SW8260A	SD	DIBROMOCHLOROMETHANE	89		
9804186	9804186-5MSD	SW8260A	SD	DIBROMOMETHANE			
9804186	9804186-5MSD	SW8260A	SD	DICHLORODIFLUOROMETHANE	96		
9804186	9804186-5MSD	SW8260A	SD	ETHYL BENZENE	95		
9804186	9804186-5MSD	SW8260A	SD	HEXACHLOROBUTADIENE	98		
9804186	9804186-5MSD	SW8260A	SD		99		

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9804186	9804186-5MSD	SW8260A	SD	ISOPROPYLBENZENE	99		
9804186	9804186-5MSD	SW8260A	SD	m,p-xylene	99		
9804186	9804186-5MSD	SW8260A	SD	METHYLENE CHLORIDE	69		
9804186	9804186-5MSD	SW8260A	SD	N-BUTYLBENZENE	96		
9804186	9804186-5MSD	SW8260A	SD	N-PROPYLBENZENE	100		
9804186	9804186-5MSD	SW8260A	SD	NAPHTHALENE	89		
9804186	9804186-5MSD	SW8260A	SD	OXYLENE	97		
9804186	9804186-5MSD	SW8260A	SD	P-ISOPROPYL TOLUENE	100		
9804186	9804186-5MSD	SW8260A	SD	SEC-BUTYL BENZENE	104		
9804186	9804186-5MSD	SW8260A	SD	STYRENE	91		
9804186	9804186-5MSD	SW8260A	SD	TERT-BUTYL BENZENE	101		
9804186	9804186-5MSD	SW8260A	SD	TETRACHLOROETHENE	132		
9804186	9804186-5MSD	SW8260A	SD	TOLUENE	96		
9804186	9804186-5MSD	SW8260A	SD	TOLUENE-D ₈	101		
9804186	9804186-5MSD	SW8260A	SD	TRANS-1,2-DICHLOROETHENE	782		
9804186	9804186-5MSD	SW8260A	SD	TRANS-1,3-DICHLOROPROPENE	94		
9804186	9804186-5MSD	SW8260A	SD	TRICHLOROETHENE	9508		
9804186	9804186-5MSD	SW8260A	SD	TRICHLOROFLUOROMETHANE	118		
9804186	9804186-5MSD	SW8260A	SD	VINYL CHLORIDE	352		
9804186	IC980423-3	SW9056	BS	BROMIDE	98		

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9804186	IC980423-3	SW9056	BS	CHLORIDE	97		
9804186	IC980423-3	SW9056	BS	CHLORIDE	99		
9804186	IC980423-3	SW9056	BS	FLUORIDE	95		
9804186	IC980423-3	SW9056	BS	NITRATE	99		
9804186	IC980423-3	SW9056	BS	NITRITE	102		
9804186	IC980423-3	SW9056	BS	ORTHOPHOSPHATE	100		
9804186	IC980423-3	SW9056	BS	SULFATE	99		
9804186	IC980423-3	SW9056	BS	SULFATE	101		
9804186	LCSWIP980504-2	SW6010B	BS	ALUMINUM	103.5		
9804186	LCSWIP980504-2	SW6010B	BS	CALCIUM	100.7		
9804186	LCSWIP980504-2	SW6010B	BS	IRON	111.7		
9804186	LCSWIP980504-2	SW6010B	BS	LEAD	92.7		
9804186	LCSWIP980504-2	SW6010B	BS	MAGNESIUM	102.1		
9804186	LCSWIP980504-2	SW6010B	BS	POTASSIUM	101.3		
9804186	LCSWIP980504-2	SW6010B	BS	SODIUM	102.1		
9804186	LCSWIP980506-1	SW6010B	BS	IRON	101.2		
9804186	VA980429-1LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	95		
9804186	VA980429-1LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	99		
9804186	VA980429-1LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	97		
9804186	VA980429-1LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	78		

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9804186	VA980429-1LCS	SW8260A	BS	1,1-DICHLOROETHANE	95		
9804186	VA980429-1LCS	SW8260A	BS	1,1-DICHLOROETHENE	101		
9804186	VA980429-1LCS	SW8260A	BS	1,1-DICHLOROPROPENE	103		
9804186	VA980429-1LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	88		
9804186	VA980429-1LCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	91		
9804186	VA980429-1LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	88		
9804186	VA980429-1LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	108		
9804186	VA980429-1LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROPANE	105		
9804186	VA980429-1LCS	SW8260A	BS	1,2-DIBROMOETHANE	89		
9804186	VA980429-1LCS	SW8260A	BS	1,2-DICHLOROBENZENE	93		
9804186	VA980429-1LCS	SW8260A	BS	1,2-DICHLOROETHANE	92		
9804186	VA980429-1LCS	SW8260A	BS	1,2-DICHLOROETHANE-D4	89		
9804186	VA980429-1LCS	SW8260A	BS	1,2-DICHLOROPROPANE	93		
9804186	VA980429-1LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	115		
9804186	VA980429-1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	101		
9804186	VA980429-1LCS	SW8260A	BS	1,3-DICHLOROPROPANE	84		
9804186	VA980429-1LCS	SW8260A	BS	1,4-DICHLOROBENZENE	92		
9804186	VA980429-1LCS	SW8260A	BS	1-CHLOROHEXANE	126		
9804186	VA980429-1LCS	SW8260A	BS	2,2-DICHLOROPROPANE	107		
9804186	VA980429-1LCS	SW8260A	BS	2-CHLOROTOLUENE	99		

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9804186	VA980429-1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	100		
9804186	VA980429-1LCS	SW8260A	BS	4-CHLOROTOLUENE	99		
9804186	VA980429-1LCS	SW8260A	BS	BENZENE	94		
9804186	VA980429-1LCS	SW8260A	BS	BROMOBENZENE	98		
9804186	VA980429-1LCS	SW8260A	BS	BROMOCHLOROMETHANE	87		
9804186	VA980429-1LCS	SW8260A	BS	BROMODICHLOROMETHANE	91		
9804186	VA980429-1LCS	SW8260A	BS	BROMOFORM	85		
9804186	VA980429-1LCS	SW8260A	BS	BROMOMETHANE	100		
9804186	VA980429-1LCS	SW8260A	BS	CARBON TETRACHLORIDE	105		
9804186	VA980429-1LCS	SW8260A	BS	CHLOROBENZENE	96		
9804186	VA980429-1LCS	SW8260A	BS	CHLOROETHANE	117		
9804186	VA980429-1LCS	SW8260A	BS	CHLOROFORM	91		
9804186	VA980429-1LCS	SW8260A	BS	CHLORMETHANE	103		
9804186	VA980429-1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	94		
9804186	VA980429-1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	86		
9804186	VA980429-1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	88		
9804186	VA980429-1LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	93		
9804186	VA980429-1LCS	SW8260A	BS	DI(BROMOMETHANE)	90		
9804186	VA980429-1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	94		
9804186	VA980429-1LCS	SW8260A	BS	ETHYL BENZENE	99		

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	LowerLimit	Upper Limit
9804186	VA980429-1LCS	SW8260A	BS	HEXACHLOROBUTADIENE	109		
9804186	VA980429-1LCS	SW8260A	BS	ISOPROPYLBENZENE	115		
9804186	VA980429-1LCS	SW8260A	BS	m,p-xylene	97		
9804186	VA980429-1LCS	SW8260A	BS	METHYLENE CHLORIDE	73		
9804186	VA980429-1LCS	SW8260A	BS	N-BUTYLBENZENE	103		
9804186	VA980429-1LCS	SW8260A	BS	N-PROPYLBENZENE	106		
9804186	VA980429-1LCS	SW8260A	BS	NAPHTHALENE	84		
9804186	VA980429-1LCS	SW8260A	BS	O-XYLENE	99		
9804186	VA980429-1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	107		
9804186	VA980429-1LCS	SW8260A	BS	SEC-BUTYL BENZENE	118		
9804186	VA980429-1LCS	SW8260A	BS	STYRENE	95		
9804186	VA980429-1LCS	SW8260A	BS	TERT-BUTYL BENZENE	112		
9804186	VA980429-1LCS	SW8260A	BS	TETRACHLOROETHENE	108		
9804186	VA980429-1LCS	SW8260A	BS	TOLUENE	94		
9804186	VA980429-1LCS	SW8260A	BS	TOLUENE-D ₈	97		
9804186	VA980429-1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	96		
9804186	VA980429-1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	85		
9804186	VA980429-1LCS	SW8260A	BS	TRICHLOROETHENE	97		
9804186	VA980429-1LCS	SW8260A	BS	TRICHLOROFUOROMETHANE	107		
9804186	VA980429-1LCS	SW8260A	BS	VINYL CHLORIDE	111		

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9804186	VA980430-1LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	101		
9804186	VA980430-1LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	105		
9804186	VA980430-1LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	100		
9804186	VA980430-1LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	98		
9804186	VA980430-1LCS	SW8260A	BS	1,1-DICHLOROETHANE	105		
9804186	VA980430-1LCS	SW8260A	BS	1,1-DICHLOROETHENE	103		
9804186	VA980430-1LCS	SW8260A	BS	1,1-DICHLOROPROPENE	101		
9804186	VA980430-1LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	83		
9804186	VA980430-1LCS	SW8260A	BS	1,2,3-TRICHLOROPROpane	96		
9804186	VA980430-1LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	89		
9804186	VA980430-1LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	102		
9804186	VA980430-1LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROpane	82		
9804186	VA980430-1LCS	SW8260A	BS	1,2-DIBROMOETHANE	85		
9804186	VA980430-1LCS	SW8260A	BS	1,2-DICHLOROBENZENE	90		
9804186	VA980430-1LCS	SW8260A	BS	1,2-DICHLOROETHANE	100		
9804186	VA980430-1LCS	SW8260A	BS	1,2-DICHLOROETHANE-D4	96		
9804186	VA980430-1LCS	SW8260A	BS	1,2-DICHLOROPROPANE	100		
9804186	VA980430-1LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	97		
9804186	VA980430-1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	96		
9804186	VA980430-1LCS	SW8260A	BS	1,3-DICHLOROPROPANE	99		

<u>SDG</u>	<u>Lab sampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9804186	VA980430-1LCS	SW8260A	BS	1,4-DICHLOROBENZENE	97		
9804186	VA980430-1LCS	SW8260A	BS	1-CHLOROHEXANE	104		
9804186	VA980430-1LCS	SW8260A	BS	2,2-DICHLOROPROPANE	102		
9804186	VA980430-1LCS	SW8260A	BS	2-CHLOROTOLUENE	99		
9804186	VA980430-1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	97		
9804186	VA980430-1LCS	SW8260A	BS	4-CHLOROTOLUENE	98		
9804186	VA980430-1LCS	SW8260A	BS	BENZENE	99		
9804186	VA980430-1LCS	SW8260A	BS	BROMOBENZENE	116		
9804186	VA980430-1LCS	SW8260A	BS	BROMOCHLOROMETHANE	100		
9804186	VA980430-1LCS	SW8260A	BS	BROMODICHLOROMETHANE	98		
9804186	VA980430-1LCS	SW8260A	BS	BROMOFORM	93		
9804186	VA980430-1LCS	SW8260A	BS	BROMOMETHANE	95		
9804186	VA980430-1LCS	SW8260A	BS	CARBON TETRACHLORIDE	102		
9804186	VA980430-1LCS	SW8260A	BS	CHLOROBENZENE	101		
9804186	VA980430-1LCS	SW8260A	BS	CHLOROETHANE	102		
9804186	VA980430-1LCS	SW8260A	BS	CHLOROFORM	97		
9804186	VA980430-1LCS	SW8260A	BS	CHLORMETHANE	105		
9804186	VA980430-1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	104		
9804186	VA980430-1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	97		
9804186	VA980430-1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	83		

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9804186	VA980430-1LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	98		
9804186	VA980430-1LCS	SW8260A	BS	DIBROMOMETHANE	95		
9804186	VA980430-1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	89		
9804186	VA980430-1LCS	SW8260A	BS	ETHYL BENZENE	98		
9804186	VA980430-1LCS	SW8260A	BS	HEXA CHLOROBUTADIENE	106		
9804186	VA980430-1LCS	SW8260A	BS	ISOPROPYL BENZENE	89		
9804186	VA980430-1LCS	SW8260A	BS	m,p-xylene	104		
9804186	VA980430-1LCS	SW8260A	BS	METHYLENE CHLORIDE	107		
9804186	VA980430-1LCS	SW8260A	BS	N-BUTYL BENZENE	90		
9804186	VA980430-1LCS	SW8260A	BS	N-PROPYL BENZENE	101		
9804186	VA980430-1LCS	SW8260A	BS	NAPHTHALENE	81		
9804186	VA980430-1LCS	SW8260A	BS	O-XYLENE	103		
9804186	VA980430-1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	100		
9804186	VA980430-1LCS	SW8260A	BS	SEC-BUTYL BENZENE	104		
9804186	VA980430-1LCS	SW8260A	BS	STYRENE	101		
9804186	VA980430-1LCS	SW8260A	BS	TERT-BUTYL BENZENE	103		
9804186	VA980430-1LCS	SW8260A	BS	TETRACHLOROETHENE	104		
9804186	VA980430-1LCS	SW8260A	BS	TOLUENE	97		
9804186	VA980430-1LCS	SW8260A	BS	TOLUENE-D8	100		
9804186	VA980430-1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	103		

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9804186	VA980430-1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	96		
9804186	VA980430-1LCS	SW8260A	BS	TRICHLOROETHENE	95		
9804186	VA980430-1LCS	SW8260A	BS	TRICHLOROFLUOROMETHANE	99		
9804186	VA980430-1LCS	SW8260A	BS	VINYL CHLORIDE	102		
9804214	9804214-5	sw9056	SD	NITRITE	106		
9804214	9804214-5	SW9056	SD	ORTHOPHOSPHATE	114		
9804214	9804214-5	sw9056	SD	SULFATE	100		
9804214	9804214-5	SW9060	SD	TOTAL ORGANIC CARBON	84		
9804214	9804214-5MSD	SW6010B	SD	ALUMINUM			
9804214	9804214-5MSD	SW6010B	SD	CALCIUM			
9804214	9804214-5MSD	SW6010B	SD	IRON			
9804214	9804214-5MSD	SW6010B	SD	LEAD			
9804214	9804214-5MSD	SW6010B	SD	MAGNESIUM			
9804214	9804214-5MSD	SW6010B	SD	POTASSIUM			
9804214	9804214-5MSD	SW6010B	SD	SODIUM			
9804214	9804214-5MSD	SW8260A	SD	1,1,1,2-TETRACHLOROETHANE	78		
9804214	9804214-5MSD	SW8260A	SD	1,1,1-TRICHLOROETHANE	78		
9804214	9804214-5MSD	SW8260A	SD	1,1,2,2-TETRACHLOROETHANE	95		
9804214	9804214-5MSD	SW8260A	SD	1,1,2-TRICHLOROETHANE	93		
9804214	9804214-5MSD	SW8260A	SD	1,1-DICHLOROETHANE	81		

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9804214	9804214-5MSD	SW8260A	SD	1,1-DICHLOROETHENE	80		
9804214	9804214-5MSD	SW8260A	SD	1,1-DICHLOROPROPENE	71		
9804214	9804214-5MSD	SW8260A	SD	1,2,3-TRICHLOROBENZENE	81		
9804214	9804214-5MSD	SW8260A	SD	1,2,3-TRICHLOROPROPANE	83		
9804214	9804214-5MSD	SW8260A	SD	1,2,4-TRICHLOROBENZENE	77		
9804214	9804214-5MSD	SW8260A	SD	1,2,4-TRIMETHYLBENZENE	73		
9804214	9804214-5MSD	SW8260A	SD	1,2-DIBROMO-3-CHLOROPROPANE	70		
9804214	9804214-5MSD	SW8260A	SD	1,2-DIBROMOETHANE	88		
9804214	9804214-5MSD	SW8260A	SD	1,2-DICHLOROBENZENE	78		
9804214	9804214-5MSD	SW8260A	SD	1,2-DICHLOROETHANE	86		
9804214	9804214-5MSD	SW8260A	SD	1,2-DICHLOROETHANE-D4	103		
9804214	9804214-5MSD	SW8260A	SD	1,2-DICHLOROPROPANE	80		
9804214	9804214-5MSD	SW8260A	SD	1,3,5-TRIMETHYLBENZENE	73		
9804214	9804214-5MSD	SW8260A	SD	1,3-DICHLOROBENZENE	78		
9804214	9804214-5MSD	SW8260A	SD	1,3-DICHLOROPROPANE	85		
9804214	9804214-5MSD	SW8260A	SD	1,4-DICHLOROBENZENE	76		
9804214	9804214-5MSD	SW8260A	SD	1-CHLOROHEXANE	79		
9804214	9804214-5MSD	SW8260A	SD	2,2-DICHLOROPROPANE	72		
9804214	9804214-5MSD	SW8260A	SD	2-CHLOROTOLUENE	82		
9804214	9804214-5MSD	SW8260A	SD	4-BROMOFLUOROBENZENE	104		

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>LowerLimit</u>	<u>Upper Limit</u>
9804214	9804214-5MSD	SW8260A	SD	4-CHLOROTOLUENE	78		
9804214	9804214-5MSD	SW8260A	SD	BENZENE	81		
9804214	9804214-5MSD	SW8260A	SD	BROMOBENZENE	82		
9804214	9804214-5MSD	SW8260A	SD	BROMOCHLOROMETHANE	83		
9804214	9804214-5MSD	SW8260A	SD	BROMODICHLOROMETHANE	78		
9804214	9804214-5MSD	SW8260A	SD	BROMOFORM	80		
9804214	9804214-5MSD	SW8260A	SD	BROMOMETHANE	75		
9804214	9804214-5MSD	SW8260A	SD	CARBON TETRACHLORIDE	75		
9804214	9804214-5MSD	SW8260A	SD	CHLOROBENZENE	82		
9804214	9804214-5MSD	SW8260A	SD	CHLOROETHANE	77		
9804214	9804214-5MSD	SW8260A	SD	CHLOROFORM	82		
9804214	9804214-5MSD	SW8260A	SD	CHLORMETHANE	88		
9804214	9804214-5MSD	SW8260A	SD	CIS-1,2-DICHLOROETHENE	116		
9804214	9804214-5MSD	SW8260A	SD	CIS-1,3-DICHLOROPROPENE	77		
9804214	9804214-5MSD	SW8260A	SD	DIBROMOCHLOROMETHANE	80		
9804214	9804214-5MSD	SW8260A	SD	DIBROMOFLUOROMETHANE	108		
9804214	9804214-5MSD	SW8260A	SD	DIBROMOMETHANE	84		
9804214	9804214-5MSD	SW8260A	SD	DICHLORDIFLUOROMETHANE	76		
9804214	9804214-5MSD	SW8260A	SD	ETHYL BENZENE	81		
9804214	9804214-5MSD	SW8260A	SD	HEXACHLOROBUTADIENE	80		

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9804214	9804214-5MSD	SW8260A	SD	ISOPROPYLBENZENE	75		
9804214	9804214-5MSD	SW8260A	SD	m,p-xylene	77		
9804214	9804214-5MSD	SW8260A	SD	METHYLENE CHLORIDE	83		
9804214	9804214-5MSD	SW8260A	SD	N-BUTYLBENZENE	79		
9804214	9804214-5MSD	SW8260A	SD	N-PROPYLBENZENE	74		
9804214	9804214-5MSD	SW8260A	SD	NAPHTHALENE	79		
9804214	9804214-5MSD	SW8260A	SD	O-XYLENE	85		
9804214	9804214-5MSD	SW8260A	SD	P-ISOPROPYL TOLUENE	74		
9804214	9804214-5MSD	SW8260A	SD	SEC-BUTYL BENZENE	83		
9804214	9804214-5MSD	SW8260A	SD	STYRENE	82		
9804214	9804214-5MSD	SW8260A	SD	TERT-BUTYL BENZENE	72		
9804214	9804214-5MSD	SW8260A	SD	TETRACHLOROETHENE	75		
9804214	9804214-5MSD	SW8260A	SD	TOLUENE	73		
9804214	9804214-5MSD	SW8260A	SD	TOLUENE-D8	98		
9804214	9804214-5MSD	SW8260A	SD	TRANS-1,2-DICHLOROETHENE	119		
9804214	9804214-5MSD	SW8260A	SD	TRANS-1,3-DICHLOROPROPENE	80		
9804214	9804214-5MSD	SW8260A	SD	TRICHLOROETHENE	69		
9804214	9804214-5MSD	SW8260A	SD	TRICHLOROFLUOROMETHANE	78		
9804214	9804214-5MSD	SW8260A	SD	VINYL CHLORIDE	86		
9804214	IC980428-1	EPA300.0	BS	CHLORIDE	99		

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9804214	IC980428-1	EPA300.0	BS	CHLORIDE	104		
9804214	IC980428-1	EPA300.0	BS	FLUORIDE	104		
9804214	IC980428-1	EPA300.0	BS	NITRATE	105		
9804214	IC980428-1	EPA300.0	BS	NITRITE	107		
9804214	IC980428-1	EPA300.0	BS	SULFATE	101		
9804214	IC980428-1	EPA300.0	BS	SULFATE	105		
9804214	IC980428-1	SW9056	BS	BROMIDE	103		
9804214	IC980428-1	sw9056	BS	CHLORIDE	99		
9804214	IC980428-1	sw9056	BS	CHLORIDE	104		
9804214	IC980428-1	sw9056	BS	FLUORIDE	104		
9804214	IC980428-1	sw9056	BS	NITRATE	105		
9804214	IC980428-1	sw9056	BS	NITRITE	107		
9804214	IC980428-1	sw9056	BS	ORTHOPHOSPHATE	107		
9804214	IC980428-1	sw9056	BS	SULFATE	101		
9804214	IC980428-1	sw9056	BS	SULFATE	105		
9804214	LCSWIP980506-1	SW6010B	BS	ALUMINUM	102.2		
9804214	LCSWIP980506-1	SW6010B	BS	CALCIUM	100.6		
9804214	LCSWIP980506-1	SW6010B	BS	IRON	101.2		
9804214	LCSWIP980506-1	SW6010B	BS	LEAD	101.2		
9804214	LCSWIP980506-1	SW6010B	BS	MAGNESIUM	102.7		

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9804214	LCSWIP980506-1	SW6010B	BS	POTASSIUM	102		
9804214	LCSWIP980506-1	SW6010B	BS	SODIUM	103.4		
9804214	VA980502-1LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	98		
9804214	VA980502-1LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	101		
9804214	VA980502-1LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	88		
9804214	VA980502-1LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	97		
9804214	VA980502-1LCS	SW8260A	BS	1,1-DICHLOROETHANE	102		
9804214	VA980502-1LCS	SW8260A	BS	1,1-DICHLOROETHENE	100		
9804214	VA980502-1LCS	SW8260A	BS	1,1-DICHLOROPROPENE	94		
9804214	VA980502-1LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	100		
9804214	VA980502-1LCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	101		
9804214	VA980502-1LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	97		
9804214	VA980502-1LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	95		
9804214	VA980502-1LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROpane	90		
9804214	VA980502-1LCS	SW8260A	BS	1,2-DIBROMOETHANE	98		
9804214	VA980502-1LCS	SW8260A	BS	1,2-DICHLOROBENZENE	93		
9804214	VA980502-1LCS	SW8260A	BS	1,2-DICHLOROETHANE	102		
9804214	VA980502-1LCS	SW8260A	BS	1,2-DICHLOROETHANE-D4	97		
9804214	VA980502-1LCS	SW8260A	BS	1,2-DICHLOROPROPANE	100		
9804214	VA980502-1LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	97		

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	LowerLimit	Upper Limit
9804214	VA980502-1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	96		
9804214	VA980502-1LCS	SW8260A	BS	1,3-DICHLOROPROPANE	97		
9804214	VA980502-1LCS	SW8260A	BS	1,4-DICHLOROBENZENE	93		
9804214	VA980502-1LCS	SW8260A	BS	1-CHLOROHEXANE	98		
9804214	VA980502-1LCS	SW8260A	BS	2,2-DICHLOROPROPANE	91		
9804214	VA980502-1LCS	SW8260A	BS	2-CHLOROTOLUENE	101		
9804214	VA980502-1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	98		
9804214	VA980502-1LCS	SW8260A	BS	4-CHLOROTOLUENE	92		
9804214	VA980502-1LCS	SW8260A	BS	BENZENE	95		
9804214	VA980502-1LCS	SW8260A	BS	BROMOBENZENE	83		
9804214	VA980502-1LCS	SW8260A	BS	BROMOCHLOROMETHANE	97		
9804214	VA980502-1LCS	SW8260A	BS	BROMODICHLOROMETHANE	98		
9804214	VA980502-1LCS	SW8260A	BS	BROMOFORM	95		
9804214	VA980502-1LCS	SW8260A	BS	BROMOMETHANE	95		
9804214	VA980502-1LCS	SW8260A	BS	CARBON TETRACHLORIDE	96		
9804214	VA980502-1LCS	SW8260A	BS	CHLOROBENZENE	95		
9804214	VA980502-1LCS	SW8260A	BS	CHLOROETHANE	113		
9804214	VA980502-1LCS	SW8260A	BS	CHLOROFORM	96		
9804214	VA980502-1LCS	SW8260A	BS	CHLOROMETHANE	113		
9804214	VA980502-1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	100		

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9804214	VA980502-1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	94		
9804214	VA980502-1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	97		
9804214	VA980502-1LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	102		
9804214	VA980502-1LCS	SW8260A	BS	DIBROMOMETHANE	97		
9804214	VA980502-1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	114		
9804214	VA980502-1LCS	SW8260A	BS	ETHYLBENZENE	93		
9804214	VA980502-1LCS	SW8260A	BS	HEXACHLOROBUTADIENE	101		
9804214	VA980502-1LCS	SW8260A	BS	ISOPROPYLBENZENE	95		
9804214	VA980502-1LCS	SW8260A	BS	m,p-xylene	101		
9804214	VA980502-1LCS	SW8260A	BS	METHYLENE CHLORIDE	111		
9804214	VA980502-1LCS	SW8260A	BS	N-BUTYLBENZENE	98		
9804214	VA980502-1LCS	SW8260A	BS	N-PROPYLBENZENE	96		
9804214	VA980502-1LCS	SW8260A	BS	NAPHTHALENE	91		
9804214	VA980502-1LCS	SW8260A	BS	O-XYLENE	96		
9804214	VA980502-1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	98		
9804214	VA980502-1LCS	SW8260A	BS	SEC-BUTYL BENZENE	98		
9804214	VA980502-1LCS	SW8260A	BS	STYRENE	92		
9804214	VA980502-1LCS	SW8260A	BS	TERT-BUTYL BENZENE	94		
9804214	VA980502-1LCS	SW8260A	BS	TETRACHLOROETHENE	97		
9804214	VA980502-1LCS	SW8260A	BS	TOLUENE	95		

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9804214	VA980502-1LCS	SW8260A	BS	TOLUENE-D8	103		
9804214	VA980502-1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	99		
9804214	VA980502-1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	95		
9804214	VA980502-1LCS	SW8260A	BS	TRICHLOROETHENE	95		
9804214	VA980502-1LCS	SW8260A	BS	TRICHLOROFLUOROMETHANE	105		
9804214	VA980502-1LCS	SW8260A	BS	VINYL CHLORIDE	108		
9804220	VA980503-1LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	96		
9804220	VA980503-1LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	104		
9804220	VA980503-1LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	97		
9804220	VA980503-1LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	90		
9804220	VA980503-1LCS	SW8260A	BS	1,1-DICHLOROETHANE	102		
9804220	VA980503-1LCS	SW8260A	BS	1,1-DICHLOROETHENE	102		
9804220	VA980503-1LCS	SW8260A	BS	1,1-DICHLOROPROPENE	103		
9804220	VA980503-1LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	96		
9804220	VA980503-1LCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	103		
9804220	VA980503-1LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	99		
9804220	VA980503-1LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROPROPANE	82		
9804220	VA980503-1LCS	SW8260A	BS	1,2-DIBROMOETHANE	97		
9804220	VA980503-1LCS	SW8260A	BS	1,2-DICHLOROBENZENE	93		

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9804220	VA980503-1LCS	SW8260A	BS	1,2-DICHLOROETHANE	101		
9804220	VA980503-1LCS	SW8260A	BS	1,2-DICHLOROETHANE-D4	91		
9804220	VA980503-1LCS	SW8260A	BS	1,2-DICHLOROPROPANE	97		
9804220	VA980503-1LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	105		
9804220	VA980503-1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	96		
9804220	VA980503-1LCS	SW8260A	BS	1,3-DICHLOROPROPANE	96		
9804220	VA980503-1LCS	SW8260A	BS	1,4-DICHLOROBENZENE	93		
9804220	VA980503-1LCS	SW8260A	BS	1-CHLOROHEXANE	106		
9804220	VA980503-1LCS	SW8260A	BS	2,2-DICHLOROPROPANE	106		
9804220	VA980503-1LCS	SW8260A	BS	2-CHLOROTOLUENE	97		
9804220	VA980503-1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	99		
9804220	VA980503-1LCS	SW8260A	BS	4-CHLOROTOLUENE	98		
9804220	VA980503-1LCS	SW8260A	BS	BENZENE	101		
9804220	VA980503-1LCS	SW8260A	BS	BROMOBENZENE	110		
9804220	VA980503-1LCS	SW8260A	BS	BROMOCHLOROMETHANE	90		
9804220	VA980503-1LCS	SW8260A	BS	BROMODICHLOROMETHANE	94		
9804220	VA980503-1LCS	SW8260A	BS	BROMOFORM	89		
9804220	VA980503-1LCS	SW8260A	BS	BROMOMETHANE	93		
9804220	VA980503-1LCS	SW8260A	BS	CARBON TETRACHLORIDE	109		
9804220	VA980503-1LCS	SW8260A	BS	CHLOROBENZENE	101		

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9804220	VA980503-1LCS	SW8260A	BS	CHLOROETHANE	108		
9804220	VA980503-1LCS	SW8260A	BS	CHLOROFORM	97		
9804220	VA980503-1LCS	SW8260A	BS	CHLOROMETHANE	118		
9804220	VA980503-1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	101		
9804220	VA980503-1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	93		
9804220	VA980503-1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	96		
9804220	VA980503-1LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	96		
9804220	VA980503-1LCS	SW8260A	BS	DIBROMOMETHANE	94		
9804220	VA980503-1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	135		
9804220	VA980503-1LCS	SW8260A	BS	ETHYLBENZENE	104		
9804220	VA980503-1LCS	SW8260A	BS	HEXACHLOROBUTADIENE	110		
9804220	VA980503-1LCS	SW8260A	BS	ISOPROPYL BENZENE	103		
9804220	VA980503-1LCS	SW8260A	BS	m,p-xylene	107		
9804220	VA980503-1LCS	SW8260A	BS	METHYLENE CHLORIDE	101		
9804220	VA980503-1LCS	SW8260A	BS	N-BUTYL BENZENE	110		
9804220	VA980503-1LCS	SW8260A	BS	N-PROPYLBENZENE	105		
9804220	VA980503-1LCS	SW8260A	BS	NAPHTHALENE	91		
9804220	VA980503-1LCS	SW8260A	BS	OXYLENE	100		
9804220	VA980503-1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	106		
9804220	VA980503-1LCS	SW8260A	BS	SEC-BUTYL BENZENE	109		

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9804220	VA980503-1LCS	SW8260A	BS	STYRENE	96		
9804220	VA980503-1LCS	SW8260A	BS	TERT-BUTYLBENZENE	102		
9804220	VA980503-1LCS	SW8260A	BS	TETRACHLOROETHENE	104		
9804220	VA980503-1LCS	SW8260A	BS	TOLUENE	95		
9804220	VA980503-1LCS	SW8260A	BS	TOLUENE-D8	104		
9804220	VA980503-1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	101		
9804220	VA980503-1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	91		
9804220	VA980503-1LCS	SW8260A	BS	TRICHLOROETHENE	94		
9804220	VA980503-1LCS	SW8260A	BS	TRICHLOROFUOROMETHANE	104		
9804220	VA980503-1LCS	SW8260A	BS	VINYL CHLORIDE	116		
9804237	VA980508-1LCS	SW8260A	BS	1,1,2-TETRACHLOROETHANE	107		
9804237	VA980508-1LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	112		
9804237	VA980508-1LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	105		
9804237	VA980508-1LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	103		
9804237	VA980508-1LCS	SW8260A	BS	1,1-DICHLOROETHANE	108		
9804237	VA980508-1LCS	SW8260A	BS	1,1-DICHLOROPROPENE	113		
9804237	VA980508-1LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	104		
9804237	VA980508-1LCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	98		
9804237	VA980508-1LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	106		

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9804237	VA980508-1LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	104		
9804237	VA980508-1LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROpane	90		
9804237	VA980508-1LCS	SW8260A	BS	1,2-DIBROMOETHANE	99		
9804237	VA980508-1LCS	SW8260A	BS	1,2-DICHLOROBENZENE	106		
9804237	VA980508-1LCS	SW8260A	BS	1,2-DICHLOROETHANE	108		
9804237	VA980508-1LCS	SW8260A	BS	1,2-DICHLOROETHANE-D4	94		
9804237	VA980508-1LCS	SW8260A	BS	1,2-DICHLOROPROPANE	105		
9804237	VA980508-1LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	110		
9804237	VA980508-1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	104		
9804237	VA980508-1LCS	SW8260A	BS	1,3-DICHLOROPROPANE	101		
9804237	VA980508-1LCS	SW8260A	BS	1,4-DICHLOROBENZENE	96		
9804237	VA980508-1LCS	SW8260A	BS	1-CHLOROHEXANE	113		
9804237	VA980508-1LCS	SW8260A	BS	2,2-DICHLOROPROPANE	116		
9804237	VA980508-1LCS	SW8260A	BS	2-CHLOROTOLUENE	98		
9804237	VA980508-1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	97		
9804237	VA980508-1LCS	SW8260A	BS	4-CHLOROTOLUENE	99		
9804237	VA980508-1LCS	SW8260A	BS	BENZENE	105		
9804237	VA980508-1LCS	SW8260A	BS	BROMOBENZENE	111		
9804237	VA980508-1LCS	SW8260A	BS	BROMOCHLOROMETHANE	95		
9804237	VA980508-1LCS	SW8260A	BS	BROMODICHLOROMETHANE	106		

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9804237	VA980508-1LCS	SW8260A	BS	BROMOFORM	99		
9804237	VA980508-1LCS	SW8260A	BS	BROMOMETHANE	109		
9804237	VA980508-1LCS	SW8260A	BS	CARBON TETRACHLORIDE	116		
9804237	VA980508-1LCS	SW8260A	BS	CHLOROBENZENE	105		
9804237	VA980508-1LCS	SW8260A	BS	CHLOROETHANE	121		
9804237	VA980508-1LCS	SW8260A	BS	CHLOROFORM	100		
9804237	VA980508-1LCS	SW8260A	BS	CHLORMETHANE	104		
9804237	VA980508-1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	109		
9804237	VA980508-1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	101		
9804237	VA980508-1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	101		
9804237	VA980508-1LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	97		
9804237	VA980508-1LCS	SW8260A	BS	DIBROMOMETHANE	104		
9804237	VA980508-1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	77		
9804237	VA980508-1LCS	SW8260A	BS	ETHYL BENZENE	111		
9804237	VA980508-1LCS	SW8260A	BS	HEXACHLOROBUTADIENE	112		
9804237	VA980508-1LCS	SW8260A	BS	ISOPROPYL BENZENE	111		
9804237	VA980508-1LCS	SW8260A	BS	m,p-xylene	119		
9804237	VA980508-1LCS	SW8260A	BS	METHYLENE CHLORIDE	109		
9804237	VA980508-1LCS	SW8260A	BS	N-BUTYL BENZENE	118		
9804237	VA980508-1LCS	SW8260A	BS	N-PROPYLBENZENE	114		

SDG	LabsampleID	Method	QC Type	Analyte	%Recovery	Lower Limit	Upper Limit
9804237	VA980508-1LCS	SW8260A	BS	NAPHTHALENE	91		
9804237	VA980508-1LCS	SW8260A	BS	O-XYLENE	113		
9804237	VA980508-1LCS	SW8260A	BS	P-ISOPROPYL TOLUENE	108		
9804237	VA980508-1LCS	SW8260A	BS	SEC-BUTYL BENZENE	111		
9804237	VA980508-1LCS	SW8260A	BS	STYRENE	112		
9804237	VA980508-1LCS	SW8260A	BS	TERT-BUTYL BENZENE	106		
9804237	VA980508-1LCS	SW8260A	BS	TETRACHLOROETHENE	112		
9804237	VA980508-1LCS	SW8260A	BS	TOLUENE	99		
9804237	VA980508-1LCS	SW8260A	BS	TOLUENE-D8	99		
9804237	VA980508-1LCS	SW8260A	BS	TRANS-1,2-DICHLOROETHENE	110		
9804237	VA980508-1LCS	SW8260A	BS	TRANS-1,3-DICHLOROPROPENE	100		
9804237	VA980508-1LCS	SW8260A	BS	TRICHLOROETHENE	103		
9804237	VA980508-1LCS	SW8260A	BS	TRICHLOROFLUOROMETHANE	115		
9804237	VA980508-1LCS	SW8260A	BS	VINYL CHLORIDE	99		
9804237	VA980511-1LCS	SW8260A	BS	1,1,1,2-TETRACHLOROETHANE	99		
9804237	VA980511-1LCS	SW8260A	BS	1,1,1-TRICHLOROETHANE	102		
9804237	VA980511-1LCS	SW8260A	BS	1,1,2,2-TETRACHLOROETHANE	99		
9804237	VA980511-1LCS	SW8260A	BS	1,1,2-TRICHLOROETHANE	101		
9804237	VA980511-1LCS	SW8260A	BS	1,1-DICHLOROETHANE	100		
9804237	VA980511-1LCS	SW8260A	BS	1,1-DICHLOROETHENE	96		

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9804237	VA980511-1LCS	SW8260A	BS	1,4-DICHLOROPROPENE	97		
9804237	VA980511-1LCS	SW8260A	BS	1,2,3-TRICHLOROBENZENE	94		
9804237	VA980511-1LCS	SW8260A	BS	1,2,3-TRICHLOROPROPANE	108		
9804237	VA980511-1LCS	SW8260A	BS	1,2,4-TRICHLOROBENZENE	91		
9804237	VA980511-1LCS	SW8260A	BS	1,2,4-TRIMETHYLBENZENE	93		
9804237	VA980511-1LCS	SW8260A	BS	1,2-DIBROMO-3-CHLOROPROPANE	78		
9804237	VA980511-1LCS	SW8260A	BS	1,2-DIBROMOETHANE	95		
9804237	VA980511-1LCS	SW8260A	BS	1,2-DICHLOROBENZENE	95		
9804237	VA980511-1LCS	SW8260A	BS	1,2-DICHLOROETHANE	106		
9804237	VA980511-1LCS	SW8260A	BS	1,2-DICHLOROETHANE-D4	99		
9804237	VA980511-1LCS	SW8260A	BS	1,2-DICHLOROPROPANE	100		
9804237	VA980511-1LCS	SW8260A	BS	1,3,5-TRIMETHYLBENZENE	91		
9804237	VA980511-1LCS	SW8260A	BS	1,3-DICHLOROBENZENE	95		
9804237	VA980511-1LCS	SW8260A	BS	1,3-DICHLOROPROPANE	97		
9804237	VA980511-1LCS	SW8260A	BS	1,4-DICHLOROBENZENE	89		
9804237	VA980511-1LCS	SW8260A	BS	1-CHLOROHEXANE	94		
9804237	VA980511-1LCS	SW8260A	BS	2,2-DICHLOROPROPANE	95		
9804237	VA980511-1LCS	SW8260A	BS	2-CHLOROTOLUENE	87		
9804237	VA980511-1LCS	SW8260A	BS	4-BROMOFLUOROBENZENE	98		
9804237	VA980511-1LCS	SW8260A	BS	4-CHLOROTOLUENE	97		

<u>SDG</u>	<u>LabsampleID</u>	<u>Method</u>	<u>QC Type</u>	<u>Analyte</u>	<u>%Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
9804237	VA980511-1LCS	SW8260A	BS	BENZENE	99		
9804237	VA980511-1LCS	SW8260A	BS	BROMOBENZENE	103		
9804237	VA980511-1LCS	SW8260A	BS	BROMOCHLOROMETHANE	97		
9804237	VA980511-1LCS	SW8260A	BS	BROMODICHLOROMETHANE	98		
9804237	VA980511-1LCS	SW8260A	BS	BROMOFORM	94		
9804237	VA980511-1LCS	SW8260A	BS	BROMOMETHANE	111		
9804237	VA980511-1LCS	SW8260A	BS	CARBON TETRACHLORIDE	100		
9804237	VA980511-1LCS	SW8260A	BS	CHLOROBENZENE	95		
9804237	VA980511-1LCS	SW8260A	BS	CHLOROETHANE	110		
9804237	VA980511-1LCS	SW8260A	BS	CHLOROFORM	100		
9804237	VA980511-1LCS	SW8260A	BS	CHLOROMETHANE	112		
9804237	VA980511-1LCS	SW8260A	BS	CIS-1,2-DICHLOROETHENE	98		
9804237	VA980511-1LCS	SW8260A	BS	CIS-1,3-DICHLOROPROPENE	96		
9804237	VA980511-1LCS	SW8260A	BS	DIBROMOCHLOROMETHANE	100		
9804237	VA980511-1LCS	SW8260A	BS	DIBROMOFLUOROMETHANE	98		
9804237	VA980511-1LCS	SW8260A	BS	DIBROMOMETHANE	103		
9804237	VA980511-1LCS	SW8260A	BS	DICHLORODIFLUOROMETHANE	86		
9804237	VA980511-1LCS	SW8260A	BS	ETHYLBENZENE	97		
9804237	VA980511-1LCS	SW8260A	BS	HEXACHLOROBUTADIENE	90		
9804237	VA980511-1LCS	SW8260A	BS	ISOPROPYLBENZENE	96		

TAB

G-3.4 DETECTS' SUMMARY

Detectors Summary

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
AHA004	WATER	CIS-1,2-DICHLOROETHENE	N	33	12	UG/L
		TRANS-1,2-DICHLOROETHENE	N	7.5	6	UG/L
		TRICHLOROETHENE	N	230	10	UG/L
AHA005	WATER	CIS-1,2-DICHLOROETHENE	N	40	12	UG/L
		TRANS-1,2-DICHLOROETHENE	N	16	6	UG/L
		TRICHLOROETHENE	N	200	10	UG/L
AHA009	WATER	1,2,4-TRIMETHYLBENZENE	N	350	26	UG/L
		CHLOROFORM	N	7.6	6	UG/L
		ISOPROPYLBENZENE	N	7.2	F	10
AHA010	WATER	SEC-BUTYLBENZENE	N	11	F	26
		CHLOROFORM	N	9.8	J	6
		CIS-1,2-DICHLOROETHENE	N	89		24
		TRICHLOROETHENE	N	320	J	20

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
AHA011FD1	WATER	CHLOROFORM	FD	I4	J	6
		CIS-1,2-DICHLOROETHENE	FD	92		UG/L
		TRICHLOROETHENE	FD	290	J	UG/L
AHA012	WATER	CHLOROFORM	N	10		6
		CIS-1,2-DICHLOROETHENE	N	94		24
		TRANS-1,2-DICHLOROETHENE	N	67		12
		TRICHLOROETHENE	N	180	J	20
AHA025	SOIL					
		1,2,4-TRIMETHYLBENZENE	N	0.15		0.041
		1,3,5-TRIMETHYLBENZENE	N	0.05		0.018
		ETHYLBENZENE	N	0.032		MG/KG
		M,P,XYLENE	N	0.12		0.018
		N-BUTYLBENZENE	N	0.015	F	0.041
		N-PROPYLBENZENE	N	0.019		MG/KG
		SEC-BUTYLBENZENE	N	0.012	F	0.012
		TERT-BUTYLBENZENE	N	0.014	F	0.041
						MG/KG
AHA028	SOIL	TOTAL ORGANIC CARBON	N	3480		952
						MG/KG

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
AHA029	SOIL	TOTAL ORGANIC CARBON	N	5150	513	MG/KG
AHA030	SOIL	TOTAL ORGANIC CARBON	N	2080	1820	MG/KG
AHA033	SOIL	TOTAL ORGANIC CARBON	N	1150	408	MG/KG
AHA039	SOIL	TOTAL ORGANIC CARBON	N	1060	31	MG/KG
AHA046	SOIL	M,P,XYLENE	N	0.0023	F	0.0078
AHA057	WATER		N	658	44.2	UG/L
	ALUMINUM		N	0.32	0.1	MG/L
	BROMIDE		N	96300	104	UG/L
	CALCIUM		N	39	4	MG/L
	CHLORIDE		N	0.72	0.2	MG/L
	FLUORIDE		N	2090	8	UG/L
	IRON		N	8700	95.4	UG/L
	MAGNESIUM		N		651	UG/L
					72.3	UG/L
					97.1	UG/L

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
	METHANE	N	475		0.35	ug/L
	NAPHTHALENE	N	0.34	F	0.4	UG/L
	POTASSIUM	N	4000	F	69.9	UG/L
	SODIUM	N	40600		60.5	UG/L
	SULFATE	N	29.6		0.2	MGL
	TOTAL ALKALINITY	N	275.5	S	50	MGL
	TOTAL ORGANIC CARBON	N	3		1	MGL
AHA058	WATER					
	ALUMINUM	N	81.8	F	44.2	UG/L
	BROMIDE	N	0.7		0.1	MGL
	CALCIUM	N	120000		104	UG/L
	CHLORIDE	N	34		4	MGL
	FLUORIDE	N	0.6		0.2	MGL
	IRON	N	244		8	UG/L
	MAGNESIUM	N	7200		95.4	UG/L
	NITRATE	N	1		0.1	MGL
	POTASSIUM	N	740	F	69.9	UG/L
	SODIUM	N	51200		60.5	UG/L
	SULFATE	N	27.7		0.2	MGL
	TOTAL ALKALINITY	N	350	S	50	MGL
	WATER					

652797

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
		ALUMINUM	N	170	F	44.2
		BROMIDE	N	0.4	0.1	MG/L
		CALCIUM	N	136000	104	UG/L
		CHLORIDE	N	19	2	MG/L
		FLUORIDE	N	0.4	0.2	MG/L
		IRON	N	422	8	UG/L
		MAGNESIUM	N	11200	95.4	UG/L
		METHANE	N	65.2	0.37	ug/L
		NITRATE	N	1.4	0.1	MG/L
		POTASSIUM	N	3320	F	69.9
		SODIUM	N	43200	60.5	UG/L
		SULFATE	N	89	2	MG/L
		TOTAL ALKALINITY	N	370	50	MG/L
		TOTAL ORGANIC CARBON	N	3	1	MG/L
AHA063	WATER					
		ALUMINUM	N	120	F	44.2
		BROMIDE	N	1.2	0.1	MG/L
		CALCIUM	N	149000	38.5	UG/L
		CHLORIDE	N	120	4	MG/L
		CIS-1,2-DICHLOROETHENE	N	250	30	UG/L
		FLUORIDE	N	0.5	0.2	MG/L
		IRON	N	3890	15.3	UG/L

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
	MAGNESIUM	N	9190		21.4	UG/L
METHANE		N	194		0.35	ug/L
NITRATE		N	4.8	J	0.1	MG/L
POTASSIUM		N	1370	F	40.9	UG/L
SODIUM		N	122000		93.4	UG/L
SULFATE		N	65		4	MG/L
TOLUENE		N	14	F	28	UG/L
TOTAL ALKALINITY		N	440	S	50	MG/L
TOTAL ORGANIC CARBON		N	4		1	MG/L
TRANS-1,2-DICHLOROETHENE		N	69	J	15	UG/L
TRICHLOROETHENE		N	620	J	25	UG/L
AHA064	WATER					
	BROMIDE	N	1		0.1	MG/L
	CALCIUM	N	114000		38.5	UG/L
	CHLORIDE	N	94		4	MG/L
	CIS-1,2-DICHLOROETHENE	N	75	J	30	UG/L
	FLUORIDE	N	0.7		0.2	MG/L
	IRON	N	242		15.3	UG/L
	MAGNESIUM	N	12400		21.4	UG/L
	METHANE	N	2.96		0.35	ug/L
	NITRATE	N	3.9	J	0.1	MG/L
	POTASSIUM	N	2040	F	40.9	UG/L

6521978

Field ID	Matrix	Analyte	QAQC Type	Result	Qualifier	Report Limit	Units
	SODIUM	N	99800			46.7	UG/L
	SULFATE	N	70			4	MG/L
	TOTAL ALKALINITY	N	380	S		50	MG/L
	TRANS-1,2-DICHLOROETHENE	N	53	J		15	UG/L
	TRICHLOROETHENE	N	540	J		25	UG/L
AHA065	WATER						
	ALUMINUM	N	1190	J		44.2	UG/L
	BROMIDE	N	0.5			0.1	MG/L
	CALCIUM	N	96100			38.5	UG/L
	CHLORIDE	N	22			1	MG/L
	FLUORIDE	N	0.4			0.2	MG/L
	IRON	N	2170			15.3	UG/L
	LEAD	N	4	F		0.7	UG/L
	MAGNESIUM	N	11000			21.4	UG/L
	NITRATE	N	4.7	J		0.1	MG/L
	POTASSIUM	N	3300	F		40.9	UG/L
	SODIUM	N	27500			46.7	UG/L
	SULFATE	N	56			1	MG/L
	TOTAL ALKALINITY	N	240	S		50	MG/L
	TOTAL ORGANIC CARBON	N	2			1	MG/L
AHA066	WATER						

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
		ALUMINUM	N	1050	J	44.2
		BROMIDE	N	1.42	0.1	MG/L
		CALCIUM	N	170000	38.5	UG/L
		CHLORIDE	N	76	10	MG/L
		FLUORIDE	N	1.66	0.2	MG/L
		IRON	N	1370	15.3	UG/L
		MAGNESIUM	N	28200	21.4	UG/L
		METHANE	N	11.1	0.36	ug/L
		POTASSIUM	N	2530	F	40.9
		SODIUM	N	95300	93.4	UG/L
		SULFATE	N	120	10	MG/L
		TOTAL ALKALINITY	N	500	50	MG/L
		TOTAL ORGANIC CARBON	N	10	1	MG/L
AHA067	WATER					
		BROMIDE	N	8.6	0.5	MG/L
		CALCIUM	N	926000	3850	UG/L
		CHLORIDE	N	2600	100	MG/L
		FLUORIDE	N	6.4	1	MG/L
		IRON	N	108	15.3	UG/L
		MAGNESIUM	N	57000	21.4	UG/L
		METHANE	N	0.38	0.35	ug/L
		ORTHOPHOSPHATE	N	2.6	J	0.5

Field ID	Matrix	Analyte	QAQC Type	Result	Qualifier	Report Limit	Units
	POTASSIUM	N	20600			40.9	UG/L
	SODIUM	N	1090000			4670	UG/L
	SULFATE	N	1600			40	MG/L
	TOTAL ALKALINITY	N	330	S		50	MG/L
	TOTAL ORGANIC CARBON	N	2			1	MG/L
AHA068	WATER						
	ALUMINUM	N	358	F		44.2	UG/L
	CALCIUM	N	89800			38.5	UG/L
	CHLORIDE	N	1.2			0.2	MG/L
	FLUORIDE	N	0.3			0.2	MG/L
	IRON	N	649			15.3	UG/L
	MAGNESIUM	N	2900			21.4	UG/L
	ORTHOPHOSPHATE	N	0.1	J		0.1	MG/L
	POTASSIUM	N	1200	F		40.9	UG/L
	SODIUM	N	2930			46.7	UG/L
	SULFATE	N	4.2			0.2	MG/L
	TOTAL ALKALINITY	N	240	S		50	MG/L
AHA069FD1	WATER						
	ALUMINUM	FD	852	J		44.2	UG/L
	BROMIDE	FD	1.3			0.1	MG/L
	CALCIUM	FD	154000			38.5	UG/L

Friday, September 25, 1998

Page 9 of 37

98
652
0

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
	CHLORIDE	FD	67		4	MG/L
	FLUORIDE	FD	1.8		0.2	MG/L
	IRON	FD	1220		15.3	UG/L
	MAGNESIUM	FD	28200		21.4	UG/L
	METHANE	FD	13.5		0.45	ug/L
	POTASSIUM	FD	2720	F	40.9	UG/L
	SODIUM	FD	96600		46.7	UG/L
	SULFATE	FD	110		4	MG/L
	TOTAL ALKALINITY	FD	510	S	50	MG/L
	TOTAL ORGANIC CARBON	FD	11		1	MG/L
AHA072	WATER					
	ALUMINUM	N	673		44.2	UG/L
	BROMIDE	N	1		0.1	MG/L
	CALCIUM	N	154000		104	UG/L
	CHLORIDE	N	210		5	MG/L
	FLUORIDE	N	0.5		0.2	MG/L
	IRON	N	2000		8	UG/L
	MAGNESIUM	N	5220		95.4	UG/L
	NITRATE	N	7.6		0.1	MG/L
	POTASSIUM	N	1130	F	69.9	UG/L
	SODIUM	N	162000		60.5	UG/L
	SULFATE	N	87		5	MG/L

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
		TOTAL ALKALINITY	N	328	SJ	20
		TOTAL ORGANIC CARBON	N	4.4	J	1
		TRICHLOROETHENE	N	400	J	25
AHA073FD1	WATER					
		ALUMINUM	FD	702		UG/L
		BROMIDE	FD	1	0.1	MG/L
		CALCIUM	FD	154000	104	UG/L
		CHLORIDE	FD	210	5	MG/L
		FLUORIDE	FD	0.6	0.2	MG/L
		IRON	FD	2130	8	UG/L
		MAGNESIUM	FD	5200	95.4	UG/L
		NITRATE	FD	7.8	0.1	MG/L
		POTASSIUM	FD	1120	F	69.9
		SODIUM	FD	160000		UG/L
		SULFATE	FD	90	5	MG/L
		TOTAL ALKALINITY	FD	330	SJ	50
		TOTAL ORGANIC CARBON	FD	3.1	J	1
		TRICHLOROETHENE	FD	400	J	25
AHA074	WATER					
		TRICHLOROETHENE	N	3.8	J	1
AHA075						

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
WATER						
	ALUMINUM	N	885		44.2	UG/L
	BROMIDE	N	0.6	0.1	MG/L	
	CALCIUM	N	152000	104	UG/L	
	CHLORIDE	N	42	2	MG/L	
	CIS-1,2-DICHLOROETHENE	N	60	30	UG/L	
	FLUORIDE	N	0.3	0.2	MG/L	
	IRON	N	1480	8	UG/L	
	MAGNESIUM	N	3850	95.4	UG/L	
	NITRATE	N	4	0.1	MG/L	
	POTASSIUM	N	2680	F	69.9	UG/L
	SODIUM	N	33300		60.5	UG/L
	SULFATE	N	20.9		0.2	MG/L
	TOTAL ALKALINITY	N	200	SJ	50	MG/L
	TRICHLOROETHENE	N	400	J	25	UG/L
AHA076						
	WATER	N	110		13	UG/L
	1,2,4-TRIMETHYLBENZENE	N	44		5	UG/L
	1,3,5-TRIMETHYLBENZENE	N			4	UG/L
	BENZENE	N	130		6	UG/L
	ETHYLBENZENE	N	45		5	UG/L
	ISOPROPYLBENZENE	N	14		13	UG/L
	M,P-XYLENE	N	73	J		

Field ID	Matrix	Analyte	QAQC Type	Result	Qualifier	Report Limit	Units
AHA077	N-BUTYLBENZENE	N	3.5	F		11	UG/L
	N-PROPYLBENZENE	N	17			4	UG/L
	P-ISOPROPYL TOLUENE	N	3.4	F		12	UG/L
	SEC-BUTYL BENZENE	N	3.4	F		13	UG/L
	TRICHLOROETHENE	N	59	J		10	UG/L
AHA078	WATER						
	TRICHLOROETHENE	N	1100	J		50	UG/L
AHA082	WATER						
	TRICHLOROETHENE	N	420	J		50	UG/L
	WATER						
	CIS-1,2-DICHLOROETHENE	N	45			2.4	UG/L
AHA083	TETRACHLOROETHENE	N	13			2.8	UG/L
	TRANS-1,2-DICHLOROETHENE	N	51			1.2	UG/L
	TRICHLOROETHENE	N	70			2	UG/L
	WATER						
AHA084	CIS-1,2-DICHLOROETHENE	N	56			24	UG/L
	TRANS-1,2-DICHLOROETHENE	N	11	F		12	UG/L
	TRICHLOROETHENE	N	520			20	UG/L
WATER							

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
AHA089	CIS-1,2-DICHLOROETHENE	N	22		6	UG/L
	TRANS-1,2-DICHLOROETHENE	N	30		3	UG/L
	TRICHLOROETHENE	N	120		5	UG/L
	WATER					
AHA090	BENZENE	N	0.31	F	0.4	UG/L
	CIS-1,2-DICHLOROETHENE	N	14	J	1.2	UG/L
	TRANS-1,2-DICHLOROETHENE	N	0.5	F	0.6	UG/L
	TRICHLOROETHENE	N	1	J	1	UG/L
AHA091	WATER					
	CIS-1,2-DICHLOROETHENE	N	2	J	6	UG/L
	TRICHLOROETHENE	N	120	J	5	UG/L
	WATER					
AHA092	CIS-1,2-DICHLOROETHENE	N	3.7	J	6	UG/L
	TETRACHLOROETHENE	N	8.1		7	UG/L
	TRICHLOROETHENE	N	150	J	5	UG/L
	WATER					
AHA093	CIS-1,2-DICHLOROETHENE	N	34	J	30	UG/L
	TRICHLOROETHENE	N	620	J	25	UG/L
AHA093 WATER						

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
AHA094	CIS-1,2-DICHLOROETHENE	N	9.5	J	30	UG/L
	TRICHLOROETHENE	N	660	J	25	UG/L
	WATER					
AHA095	CIS-1,2-DICHLOROETHENE	N	0.71	J	1.2	UG/L
	TETRACHLOROETHENE	N	1.8		1.4	UG/L
	TRICHLOROETHENE	N	26	J	1	UG/L
AHA096FD1	WATER					
	CIS-1,2-DICHLOROETHENE	N	33	J	24	UG/L
	TRICHLOROETHENE	N	530	J	20	UG/L
AHA099	WATER					
	CIS-1,2-DICHLOROETHENE	FD	33	J	24	UG/L
	TRICHLOROETHENE	FD	480	J	20	UG/L
AHA100	WATER					
	CIS-1,2-DICHLOROETHENE	N	0.48	F	1.2	UG/L
	TETRACHLOROETHENE	N	0.36	F	1.4	UG/L
	TRICHLOROETHENE	N	23		1	UG/L
	CIS-1,2-DICHLOROETHENE	N	8.9	F	12	UG/L
	TETRACHLOROETHENE	N	8.2	F	14	UG/L

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
AHA101	WATER	TRICHLOROETHENE	N	380	10	UG/L
	CIS-1,2-DICHLOROETHENE		N	1.2	F	2.4
	TRICHLOROETHENE		N	59	2	UG/L
AHA102	WATER	TRICHLOROETHENE	N	100	24	UG/L
	CIS-1,2-DICHLOROETHENE		N	500	20	UG/L
AHA103	WATER	TRICHLOROETHENE	N	7.4	F	24
	CIS-1,2-DICHLOROETHENE		N	480	20	UG/L
AHA104	WATER	TRICHLOROETHENE	N	54	24	UG/L
	CIS-1,2-DICHLOROETHENE		N	36	28	UG/L
	TETRACHLOROETHENE		N	520	20	UG/L
AHA105	WATER	TRICHLOROETHENE	N	2.7	1.2	UG/L
	CIS-1,2-DICHLOROETHENE		N	35	1	UG/L
AHA107	WATER					

Field ID	Matrix	Analyte	QAQC Type	Result	Qualifier	Report Limit	Units
		ISOPROPYLBENZENE	N	39		2	UG/L
		N-BUTYLBENZENE	N	7.5		4.4	UG/L
		N-PROPYLBENZENE	N	43		1.6	UG/L
		NAPHTHALENE	N	97		1.6	UG/L
		SEC-BUTYLBENZENE	N	14		5.2	UG/L
		TERT-BUTYLBENZENE	N	2.5	F	5.6	UG/L
AHA108	WATER						
		CIS-1,2-DICHLOROETHENE	N	57		6	UG/L
		TRANS-1,2-DICHLOROETHENE	N	85		3	UG/L
		TRICHLOROETHENE	N	13		5	UG/L
AHA109FD1	WATER						
		ISOPROPYLBENZENE	FD	42		2.5	UG/L
		N-BUTYLBENZENE	FD	7.8		5.5	UG/L
		N-PROPYLBENZENE	FD	50		2	UG/L
		NAPHTHALENE	FD	90		2	UG/L
		SEC-BUTYLBENZENE	FD	15		6.5	UG/L
		TERT-BUTYLBENZENE	FD	2.9	F	7	UG/L
AIA007	WATER						
		CIS-1,2-DICHLOROETHENE	N	35		12	UG/L
		TRANS-1,2-DICHLOROETHENE	N	23		6	UG/L

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
AIA008	TRICHLOROETHENE	N	180		10	UG/L
	WATER					
	CIS-1,2-DICHLOROETHENE	N	0.82	F	1.2	UG/L
	N-BUTYLBENZENE	N	0.41	F	1.1	UG/L
	SEC-BUTYLBENZENE	N	0.45	F	1.3	UG/L
	TRANS-1,2-DICHLOROETHENE	N	0.84		0.6	UG/L
AIA009	WATER					
	CIS-1,2-DICHLOROETHENE	N	160		24	UG/L
	TRANS-1,2-DICHLOROETHENE	N	28		12	UG/L
	TRICHLOROETHENE	N	410		20	UG/L
AIA013	WATER					
	CIS-1,2-DICHLOROETHENE	N	31		12	UG/L
	TRANS-1,2-DICHLOROETHENE	N	47		6	UG/L
	TRICHLOROETHENE	N	190		10	UG/L
	VINYL CHLORIDE	N	3	J	11	UG/L
AIA014	WATER					
	CIS-1,2-DICHLOROETHENE	N	53		24	UG/L
	TRANS-1,2-DICHLOROETHENE	N	8.8	J	12	UG/L
	TRICHLOROETHENE	N	450		20	UG/L
AIA015						

652-2990

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
	WATER					
	CIS-1,2-DICHLOROETHENE	N	39	J	2.4	UG/L
	TETRACHLOROETHENE	N	23	J	2.8	UG/L
	TRANS-1,2-DICHLOROETHENE	N	33	J	1.2	UG/L
	TRICHLOROETHENE	N	57		2	UG/L
AIA017	WATER					
	CHLOROFORM	N	0.49		0.3	UG/L
	CIS-1,2-DICHLOROETHENE	N	7.9		1.2	UG/L
	TETRACHLOROETHENE	N	2.2	J	1.4	UG/L
AIA017DL	WATER					
	TRICHLOROETHENE	N	320		20	UG/L
AIA018FD1	WATER					
	CIS-1,2-DICHLOROETHENE	FD	8.2	F	24	UG/L
	TRICHLOROETHENE	FD	380		20	UG/L
AIA019	WATER					
	TRICHLOROETHENE	N	330		20	UG/L
AIA020	WATER					
	CIS-1,2-DICHLOROETHENE	N	28	F	60	UG/L
	TRICHLOROETHENE	N	1200		50	UG/L

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
AIA021	WATER	TRICHLOROETHENE	N	0.85	F	1
AIA024	WATER	CIS-1,2-DICHLOROETHENE	N	11	F	24
		TRICHLOROETHENE	N	550		UG/L
AIA025	WATER	CIS-1,2-DICHLOROETHENE	N	1.3	F	2.4
		TETRACHLOROETHENE	N	0.82	F	2.8
		TRICHLOROETHENE	N	45		UG/L
AIA026	WATER	CIS-1,2-DICHLOROETHENE	N	12	F	24
		TETRACHLOROETHENE	N	9	F	28
		TRICHLOROETHENE	N	410		UG/L
AIA031	WATER	1,1-DICHLOROETHENE	N	0.42	F	1.2
		CIS-1,2-DICHLOROETHENE	N	84		6
		TRANS-1,2-DICHLOROETHENE	N	130		3
		TRICHLOROETHENE	N	33		UG/L
		VINYL CHLORIDE	N	2.6	J	1.1

652-9927

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
AIA032FD1	WATER	CIS-1,2-DICHLOROETHENE	FD	75	6	UG/L
		TRANS-1,2-DICHLOROETHENE	FD	120	3	UG/L
		TRICHLOROETHENE	FD	29	5	UG/L
		VINYL CHLORIDE	FD	2.3	5.5	UG/L
AIA033	WATER	ISOPROPYLBENZENE	N	44	1	UG/L
		N-BUTYLBENZENE	N	7.6	2.2	UG/L
		N-PROPYLBENZENE	N	50	0.8	UG/L
		NAPHTHALENE	N	74	0.8	UG/L
		SEC-BUTYLBENZENE	N	17	2.6	UG/L
		TERT-BUTYLBENZENE	N	3.5	2.8	UG/L
		WATER				
		NAPHTHALENE	N	1.1	0.4	UG/L
AIA036	WATER	TRICHLOROETHENE	N	1.1	1	UG/L
AIA037	WATER	CIS-1,2-DICHLOROETHENE	N	3.1	12	UG/L
		NAPHTHALENE	N	6.2	4	UG/L

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
AIA038	WATER	TRICHLOROETHENE	N	230	10	UG/L
		1,2,4-TRIMETHYLBENZENE	N	71	6.5	UG/L
		1,3,5-TRIMETHYLBENZENE	N	8.9	2.5	UG/L
		BENZENE	N	78	2	UG/L
		ETHYLBENZENE	N	32	3	UG/L
		ISOPROPYLBENZENE	N	9	2.5	UG/L
		m,p-xylene	N	37	6.5	UG/L
		N-PROPYLBENZENE	N	7.6	2	UG/L
		NAPHTHALENE	N	41	2	UG/L
		P-ISOPROPYL TOLUENE	N	1.5	F	6
		SEC-BUTYLBENZENE	N	2.4	F	6.5
		TRICHLOROETHENE	N	22	5	UG/L
AIA041	WATER	CIS-1,2-DICHLOROETHENE	N	5	1.2	UG/L
AIA042	WATER	CIS-1,2-DICHLOROETHENE	N	32	24	UG/L
		TRICHLOROETHENE	N	410	20	UG/L
AIA043	WATER	1,1-DICHLOROETHENE	N	8.2	F	24

652 '994:

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
AIA044	CIS-1,2-DICHLOROETHENE	N	73		24	UG/L
	TETRACHLOROETHENE	N	63		28	UG/L
	TRICHLOROETHENE	N	670		20	UG/L
AIA045FD1	WATER					
	CIS-1,2-DICHLOROETHENE	N	4.4	F	6	UG/L
	TETRACHLOROETHENE	N	8.5		7	UG/L
AIA046	TRICHLOROETHENE	N	140		5	UG/L
	WATER					
	CIS-1,2-DICHLOROETHENE	FD	4.9	F	6	UG/L
AIA047	TETRACHLOROETHENE	FD	9.3		7	UG/L
	TRICHLOROETHENE	FD	160		5	UG/L
	WATER					
AIA048	CIS-1,2-DICHLOROETHENE	N	2.8	F	6	UG/L
	TRICHLOROETHENE	N	120		5	UG/L
	WATER					
	CIS-1,2-DICHLOROETHENE	N	1.4	F	2.4	UG/L
	TETRACHLOROETHENE	N	3.6		2.8	UG/L
	TRICHLOROETHENE	N	43		2	UG/L

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
AIA049	CIS-1,2-DICHLOROETHENE	N	2.6		1.2	UG/L
	NAPHTHALENE	N	0.33	J	0.4	UG/L
	TRICHLOROETHENE	N	26		1	UG/L
AIA050	WATER					
	CIS-1,2-DICHLOROETHENE	N	54		12	UG/L
	TRICHLOROETHENE	N	220		10	UG/L
AIA051	WATER					
	CIS-1,2-DICHLOROETHENE	N	29		24	UG/L
	TRICHLOROETHENE	N	360		20	UG/L
AIA052	WATER					
	CIS-1,2-DICHLOROETHENE	N	2	F	2.4	UG/L
	TRICHLOROETHENE	N	53		2	UG/L
AIA053	WATER					
	CIS-1,2-DICHLOROETHENE	N	81		24	UG/L
	TRICHLOROETHENE	N	360		20	UG/L
AIB009	WATER					
	TRICHLOROETHENE	N	0.97	F	1	UG/L
	WATER					

652 9.96

Field ID	Matrix	Analyte	QAQC Type	Result	Qualifier	Report Limit	Units
AIB010	CIS-1,2-DICHLOROETHENE	N		38		2.4	UG/L
	TETRACHLOROETHENE	N		18		2.8	UG/L
	TRANS-1,2-DICHLOROETHENE	N		32		1.2	UG/L
	TRICHLOROETHENE	N		53		2	UG/L
AIB011	WATER						
	CIS-1,2-DICHLOROETHENE	N		59		24	UG/L
	TRANS-1,2-DICHLOROETHENE	N		9.4	F	12	UG/L
	TRICHLOROETHENE	N		520		20	UG/L
AIB013	WATER						
	CIS-1,2-DICHLOROETHENE	N		36		6	UG/L
	TRANS-1,2-DICHLOROETHENE	N		56		3	UG/L
	TRICHLOROETHENE	N		170		5	UG/L
AIB014	WATER						
	CIS-1,2-DICHLOROETHENE	N		3.2		1.2	UG/L
	CHLOROFORM	N		0.52		0.3	UG/L
	CIS-1,2-DICHLOROETHENE	N		7.7	J	1.2	UG/L
	P-ISOPROPYL TOLUENE	N		1.2	U	1.2	UG/L
	STYRENE	N		0.4	UJ	0.4	UG/L
	TETRACHLOROETHENE	N		2.5		1.4	UG/L

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
AIB015FD1	TRICHLOROETHENE	N	450	J	20	UG/L
	WATER					
	CIS-1,2-DICHLOROETHENE	FD	7.6	F	24	UG/L
AIB016	TRICHLOROETHENE	FD	420		20	UG/L
	WATER					
AIB019	TRICHLOROETHENE	N	0.61	F	1	UG/L
	WATER					
AIB020	ALUMINUM	N	123	U	44.2	UG/L
	CALCIUM	N	108000		104	UG/L
	CIS-1,2-DICHLOROETHENE	N	43	J	12	UG/L
	ETHANE	N	0.7		0.69	µg/L
	IRON	N	833	J	8	UG/L
	MAGNESIUM	N	13100		95.4	UG/L
	METHANE	N	4.76		0.36	µg/L
	POTASSIUM	N	1580	F	69.9	UG/L
	SODIUM	N	126000		60.5	UG/L
	TOTAL ALKALINITY AS CACO ₃	N	380		5	MGL
	TOTAL ORGANIC CARBON	N	5		1	MGL
	TRANS-1,2-DICHLOROETHENE	N	33	J	6	UG/L
	TRICHLOROETHENE	N	250	J	10	UG/L

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
AIB021						
	WATER					
	ALUMINUM	N	1410		44.2	UG/L
	CALCIUM	N	117000		104	UG/L
	IRON	N	4100	J	8	UG/L
	MAGNESIUM	N	15600		95.4	UG/L
	POTASSIUM	N	3190	F	69.9	UG/L
	SODIUM	N	29300		60.5	UG/L
	TOTAL ALKALINITY AS CACO ₃	N	200		5	MG/L
	TOTAL ORGANIC CARBON	N	4		1	MG/L
AIB022						
	WATER					
	ALUMINUM	N	780	J	44.2	UG/L
	CALCIUM	N	309000		104	UG/L
	IRON	N	1240		8	UG/L
	MAGNESIUM	N	28400		95.4	UG/L
	METHANE	N	33.8		0.37	µg/L
	POTASSIUM	N	5310		69.9	UG/L
	SODIUM	N	146000		60.5	UG/L
	TOTAL ALKALINITY AS CACO ₃	N	1100		25	MG/L
	TOTAL ORGANIC CARBON	N	4		1	MG/L
	1,1-DICHLOROETHENE	N	1.4		1.2	UG/L

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
	ALUMINUM	N	310	F	44.2	UG/L
BENZENE		N	0.63		0.4	UG/L
CALCIUM		N	147000		104	UG/L
CHLOROMETHANE		N	1.3	U	1.3	UG/L
CIS-1,2-DICHLOROETHENE		N	180		24	UG/L
ETHANE		N	20.9		0.66	µg/L
IRON		N	8230	J	8	UG/L
MAGNESIUM		N	10600		95.4	UG/L
METHANE		N	454		0.35	µg/L
POTASSIUM		N	831	F	69.9	UG/L
SODIUM		N	148000		60.5	UG/L
TETRACHLOROETHENE		N	1.2	J	1.4	UG/L
TOTAL ALKALINITY AS CACO ₃		N	450		5	MGL
TOTAL ORGANIC CARBON		N	4		1	MGL
TRANS-1,2-DICHLOROETHENE		N	34	J	0.6	UG/L
TRICHLOROETHENE		N	580		20	UG/L
VINYL CHLORIDE		N	13	J	1.1	UG/L
AIB023FD1						
WATER						
ALUMINUM	FD	373	F		44.2	UG/L
CALCIUM	FD	132000			104	UG/L
CIS-1,2-DICHLOROETHENE	FD	180			24	UG/L
ETHANE	FD	22.9			0.7	µg/L

6521000

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
	IRON		FD	552	J	8
	MAGNESIUM		FD	8400		UG/L
	METHANE		FD	503		µg/L
	POTASSIUM		FD	857	F	69.9
	SODIUM		FD	52500		UG/L
	TOTAL ALKALINITY AS CACO ₃		FD	450		MG/L
	TOTAL ORGANIC CARBON		FD	3		MG/L
	TRANS-1,2-DICHLOROETHENE		FD	32		UG/L
	TRICHLOROETHENE		FD	650		UG/L
AIB024	WATER					
	ALUMINUM		N	688		44.2
	CALCIUM		N	128000		UG/L
	IRON		N	996	J	8
	MAGNESIUM		N	4300		UG/L
	METHANE		N	11		0.37
	POTASSIUM		N	1240	F	69.9
	SODIUM		N	13700		UG/L
	TOTAL ALKALINITY AS CACO ₃		N	330		10
	TOTAL ORGANIC CARBON		N	2		MG/L
AIB025	WATER					
	CALCIUM		N	150000		104

6521001

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
	MAGNESIUM	N	32100		95.4	UG/L
	METHANE	N	22.2		0.38	µg/L
	POTASSIUM	N	1600	F	69.9	UG/L
	SODIUM	N	111000		60.5	UG/L
	TOTAL ALKALINITY AS CACO ₃	N	540		10	MGL
	TOTAL ORGANIC CARBON	N	11		1	MGL
AIB026	WATER					
	ALUMINUM	N	184	U	44.2	UG/L
	CALCIUM	N	151000		104	UG/L
	CIS-1,2-DICHLOROETHENE	N	5.9	F	12	UG/L
	IRON	N	415	J	8	UG/L
	MAGNESIUM	N	5530		95.4	UG/L
	POTASSIUM	N	1020	F	69.9	UG/L
	SODIUM	N	190000		60.5	UG/L
	TETRACHLOROETHENE	N	5.5	F	14	UG/L
	TOTAL ALKALINITY AS CACO ₃	N	370		10	MGL
	TOTAL ORGANIC CARBON	N	4		1	MGL
	TRICHLOROETHENE	N	370		10	UG/L
AIB027	WATER					
	ALUMINUM	N	393	F	44.2	UG/L
	CALCIUM	N	133000		104	UG/L

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
	IRON	N	637	J	8	UG/L
	MAGNESIUM	N	8520		95.4	UG/L
	POTASSIUM	N	815	F	69.9	UG/L
	SODIUM	N	53100		60.5	UG/L
	TOTAL ALKALINITY AS CACO ₃	N	370		10	MGL
	TOTAL ORGANIC CARBON	N	1		1	MGL
AIB028FD1	WATER					
	ALUMINUM	FD	154	U	44.2	UG/L
	CALCIUM	FD	143000	-	104	UG/L
	IRON	FD	8250	J	8	UG/L
	MAGNESIUM	FD	11000		95.4	UG/L
	POTASSIUM	FD	785	F	69.9	UG/L
	SODIUM	FD	150000		60.5	UG/L
	TOTAL ALKALINITY AS CACO ₃	FD	370		10	MGL
	TOTAL ORGANIC CARBON	FD	2		1	MGL
AIB032	WATER					
	1,1-DICHLOROPROPENE	N	1	UJ	1	UG/L
	1,2,4-TRIMETHYLBENZENE	N	1.3	UJ	1.3	UG/L
	2,2-DICHLOROPROPANE	N	3.5	UJ	3.5	UG/L
	ALUMINUM	N	7190	J	44.2	UG/L
	BROMOBENZENE	N	0.3	UJ	0.3	UG/L

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
	CALCIUM	N	144000		104	UG/L
	CIS-1,2-DICHLOROETHENE	N	1.3		1.2	UG/L
	ETHANE	N	2.81		0.64	µg/L
	IRON	N	18100		8	UG/L
	MAGNESIUM	N	9740		95.4	UG/L
	METHANE	N	367		0.34	µg/L
	N-PROPYLBENZENE	N	0.4	UJ	0.4	UG/L
	P-ISOPROPYL TOLUENE	N	1.2	UJ	1.2	UG/L
	POTASSIUM	N	4600	F	69.9	UG/L
	SEC-BUTYL BENZENE	N	0.46	UJ	1.3	UG/L
	SODIUM	N	36900		60.5	UG/L
	TERT-BUTYL BENZENE	N	1.4	UJ	1.4	UG/L
	TOLUENE	N	1.1	UJ	1.1	UG/L
	TOTAL ALKALINITY AS CACO ₃	N	290		10	MGL
	TOTAL ORGANIC CARBON	N	4		1	MGL
	TRANS-1,2-DICHLOROETHENE	N	1.6		0.6	UG/L
	TRICHLOROETHENE	N	1	UJ	1	UG/L
AIB033	WATER					
	CIS-1,2-DICHLOROETHENE	N	37		24	UG/L
	TRICHLOROETHENE	N	470		20	UG/L
AIB034	WATER					

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
AIB035	ISOPROPYLBENZENE	N	38	J	2.5	UG/L
	N-BUTYLBENZENE	N	7.1	J	5.5	UG/L
	N-PROPYLBENZENE	N	46		2	UG/L
	NAPHTHALENE	N	63		2	UG/L
	SEC-BUTYLBENZENE	N	16		6.5	UG/L
	TERT-BUTYLBENZENE	N	3	J	7	UG/L
	WATER					
AIB036	CIS-1,2-DICHLOROETHENE	N	2.8		1.2	UG/L
	TRICHLOROETHENE	N	27		1	UG/L
	WATER					
AIB037	ALUMINUM	N	57.3	J	44.2	UG/L
	CALCIUM	N	709000		520	UG/L
	IRON	N	124		8	UG/L
	MAGNESIUM	N	48700		477	UG/L
	METHANE	N	0.51		0.36	µg/L
	POTASSIUM	N	10300		69.9	UG/L
	SODIUM	N	951000		302.5	UG/L
	TOTAL ALKALINITY AS CACO ₃	N	400		10	MG/L
	TOTAL ORGANIC CARBON	N	5		1	MG/L
	WATER					

6521005.

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
	ALUMINUM	N	1740	J	44.2	UG/L
	CALCIUM	N	186000		104	UG/L
	CIS-1,2-DICHLOROETHENE	N	74		12	UG/L
	IRON	N	2960		8	UG/L
	MAGNESIUM	N	4640		95.4	UG/L
	POTASSIUM	N	2890	F	69.9	UG/L
	SODIUM	N	37700		60.5	UG/L
	TOTAL ALKALINITY AS CACO ₃	N	330		10	MG/L
	TOTAL ORGANIC CARBON	N	1		1	MG/L
	TRICHLOROETHENE	N	310		10	UG/L
AIB040	WATER					
	CIS-1,2-DICHLOROETHENE	N	6.2	F	24	UG/L
	TRICHLOROETHENE	N	360		20	UG/L
AIB041	WATER					
	TRICHLOROETHENE	N	1100		50	UG/L
AIB042	WATER					
	CIS-1,2-DICHLOROETHENE	N	12	F	24	UG/L
	TRICHLOROETHENE	N	670		20	UG/L
AIB043	WATER					
	1,2,4-TRIMETHYLBENZENE	N	67		6.5	UG/L

6521000

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
		1,2-DICHLOROETHANE	N	3.5	3	UG/L
		1,3,5-TRIMETHYLBENZENE	N	9.6	2.5	UG/L
	BENZENE		N	76	2	UG/L
	ETHYLBENZENE		N	40	3	UG/L
	ISOPROPYLBENZENE		N	7.7	2.5	UG/L
	m,p-xylene		N	35	6.5	UG/L
	N-BUTYLBENZENE		N	1.6	F	5.5
	N-PROPYLBENZENE		N	6.3	2	UG/L
	NAPHTHALENE		N	31	2	UG/L
	SEC-BUTYLBENZENE		N	1.9	F	6.5
	TRICHLOROETHENE		N	22	5	UG/L
AIB044		WATER				
		TRICHLOROETHENE	N	4.7	1	UG/L
AIB045FD1		WATER				
		TRICHLOROETHENE	FD	5	1	UG/L
AIB046		WATER				
		CIS-1,2-DICHLOROETHENE	N	2.5	F	6
		TRICHLOROETHENE	N	110	5	UG/L
AIB047		WATER				
		CIS-1,2-DICHLOROETHENE	N	2.3	F	6
						UG/L

6521007

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
AIB048	WATER	TRICHLOROETHENE	N	69	5	UG/L
		CIS-1,2-DICHLOROETHENE	N	95	24	UG/L
		TRICHLOROETHENE	N	490	20	UG/L
AIB049	WATER	TRICHLOROETHENE	N	50	24	UG/L
		CIS-1,2-DICHLOROETHENE	N	8.2	28	UG/L
		TETRACHLOROETHENE	N	500	20	UG/L
AIB050	WATER	TRICHLOROETHENE	N	4.9	12	UG/L
		CIS-1,2-DICHLOROETHENE	N	11	14	UG/L
		TETRACHLOROETHENE	N	160	10	UG/L
AIB051	WATER	TRICHLOROETHENE	N	86	12	UG/L
		CIS-1,2-DICHLOROETHENE	N	130	6	UG/L
		TRANS-1,2-DICHLOROETHENE	N	26	10	UG/L
AIB054	WATER	TRICHLOROETHENE	N	1.4	1.2	UG/L
		CIS-1,2-DICHLOROETHENE	N	0.83	J	1.4
		TETRACHLOROETHENE	N			

Field ID	Matrix	Analyte	QAQC Type	Result Qualifier	Report Limit	Units
AIB055	TRICHLOROETHENE	N	45		1	UG/L
	WATER					
	1,1-DICHLOROETHENE	N	1.1	J	1.2	UG/L
	CHLOROFORM	N	0.79		0.3	UG/L
	CIS-1,2-DICHLOROETHENE	N	15		1.2	UG/L
	TRICHLOROETHENE	N	420		20	UG/L
AIB056	WATER					
	CHLOROFORM	N	1.1		0.3	UG/L
	CIS-1,2-DICHLOROETHENE	N	75		24	UG/L
	TRICHLOROETHENE	N	600		20	UG/L
AIB057	WATER					
	CIS-1,2-DICHLOROETHENE	N	1.3		1.2	UG/L
	TRICHLOROETHENE	N	40		1	UG/L

6521009

TAB

G-3.5 DATA QUALITY EVALUATION

11/9/98
6521010

NAS FW JRB AOC 2

Data Quality Evaluation



CH2MHILL

SDG 9711001 Method SW8260A

Reviewer nh Date 2/13/98 Matrix water

Senior Review Vito D'Aurora

Field Samples 3- Water Samples

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
-----------------	------------------	-----------------	------------------	-----------------	------------------

Water

AHA001EB1	EB	AHA002TB1	TB	AHA003	N
AHA004	N	AHA005	N	LABQC	BD

1. Case Narrative Items of Interest

1. Methylene Chloride was detected in the samples at concentrations below 10x the detected concentrations in the method blank; therefore, the data were flagged U. Naphthalene was not detected in the samples.
2. Due to the concentration of target analytes, samples 4 and 5 were analyzed at a higher dilution.
3. The method blank had Methylene Chloride and Naphthalene detected above the reporting limits.
4. All LCS/LCDs were within acceptance criteria with the exception of Methylene Chloride. Due to background levels of this compound inaccurate and imprecise results occur. These were performed instead of the requested MS/MSD.
5. MS/MSDs could not be performed due to insufficient sample volume. LCS/LCD were performed instead.
6. Several compounds from the ICV/CCV order curve were within the acceptance limit but exceeded the 15% RSD criteria. These were quantitated using the average response factor due to software problem.

2. Blank Summary

Field Blanks All criteria were met.

Method Blanks The method blank had Methylene Chloride and Naphthalene detected > the reporting limits. Samples were all non-detects.

6521011

9711001 SW8260A

Page 2 of 9

<u>Blank Type</u>	<u>Blank ID</u>	<u>Analyte</u>	<u>Result</u>	<u>ReportLimit</u>	<u>LabFlag</u>	<u>Units</u>
TB	AHA002TB1	CHLOROFORM	0.44	0.15		UG/L
LB	LABQC	NAPHTHALENE	0.45	0.12		UG/L
LB	LABQC	METHYLENE CHLORI	3.5	0.21		UG/L

3. Spikes and Duplicates

Field Duplicates None

Laboratory Duplicates None

Matrix Spike MS/MSDs could not be performed due to insufficient sample volume.
LCS/LCD were performed instead.

4. Laboratory Control Sample

All LCS/LCDs were within acceptance criteria with the exception of Methylene Chloride. The non-detected samples were validated with an R flag due to a recovery < the LCL.

<u>Matrix</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>Analyte</u>	<u>Recovery</u>	<u>LowerLimit</u>	<u>UpperLimit</u>
WATER	BS	LABQC	METHYLENE CHLORIDE	56	75	125
WATER	BD	LABQC	METHYLENE CHLORIDE	55	75	125

5. Surrogates

All surrogate recoveries were within acceptance criteria.

6. Tuning and Mass Calibration

All criteria met.

7. Internal Standard

All internal standard recoveries were within acceptance criteria.

8. Calibration Information

Initial Calibration Methylene Chloride was validated with an R flag in the samples for exceeding the %RSD in the ICAL.

<u>Field ID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation Reason</u>
AHA003	METHYLENE CHLORIDE	R	IC%RSD

6521012

AHA004	METHYLENE CHLORIDE	R	IC%RSD
AHA005	METHYLENE CHLORIDE	R	IC%RSD

Continuing Calibration Methylene Chloride was validated with an R flag in the samples for exceeding the %D in the CCV.

<u>Field ID</u>	<u>LabsampleID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation</u>
AHA003	9711001-3	METHYLENE CHLORIDE	R	CV%D
AHA004	9711001-4	METHYLENE CHLORIDE	R	CV%D
AHA005	9711001-5	METHYLENE CHLORIDE	R	CV%D

9. Holding Time

Holding times were met.

10. Summary

General Comments

1. Methylene Chloride was detected in the samples at concentrations below 10x the detected concentrations in the method blank; therefore, the data were flagged U and not validated. Naphthalene was not detected in the samples and not validated.
2. All LCS/LCDs were within acceptance criteria with the exception of Methylene Chloride. The non-detected samples were validated with an R flag due to a recovery below the LCL.
3. Methylene Chloride was validated with an R flag in the samples for exceeding the %RSD in the ICAL and for exceeding the %D in the CCV.

Data Package Completeness Complete

Forms Review/ Items of Interest

1. Methylene Chloride was detected in the samples at concentrations < 10x the detected concentrations in the method blank; therefore, the data were flagged U. Naphthalene was not detected in the samples.
2. Due to the concentration of target analytes, samples 4 and 5 were analyzed at a higher dilution.

COC Review The requested MS/MSD could not be performed due to insufficient sample volume. An LCS/LCD were run instead.

6521013

9711001 SW8260A

Page 4 of 9

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA003	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.148	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	U	U	0.16	1	UG/L	
	1,1-DICHLOROETHANE	0.4	U	U	0.11	0.4	UG/L	
	1,1-DICHLOROETHENE	1.2	U	U	0.15	1.2	UG/L	
	1,1-DICHLOROPROPENE	1	U	U	0.14	1	UG/L	
	1,2,3-TRICHLOROBENZENE	0.3	U	U	0.15	0.3	UG/L	
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	U	U	0.13	0.4	UG/L	
	1,2,4-TRIMETHYLBENZENE	1.3	U	U	0.09	1.3	UG/L	
	2-DIBROMO-3-CHLOROPROPAN	2.6	U	U	0.25	2.6	UG/L	
	1,2-DIBROMOETHANE	0.6	U	U	0.19	0.6	UG/L	
	1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
	1,2-DICHLOROETHANE	0.6	U	U	0.33	0.6	UG/L	
	1,2-DICHLOROPROPANE	0.4	U	U	0.09	0.4	UG/L	
	1,3,5-TRIMETHYLBENZENE	0.5	U	U	0.1	0.5	UG/L	
	1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
	1,3-DICHLOROPROPANE	0.4	U	U	0.15	0.4	UG/L	
	1,4-DICHLOROBENZENE	0.3	U	U	0.12	0.3	UG/L	
	1-CHLOROHEXANE	0.5	U	U	0.14	0.5	UG/L	
	2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L	
	2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	
	4-BROMOFLUOROBENZENE	94	U	U	0.1	0.1	ERCEN	
	4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L	
	BENZENE	0.4	U	U	0.1	0.4	UG/L	
	BROMOBENZENE	0.3	U	U	0.09	0.3	UG/L	
	-BROMOCHLOROMETHANE	0.4	U	U	0.18	0.4	UG/L	
	BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L	
	BROMOFORM	1.2	U	U	0.18	1.2	UG/L	
	BROMOMETHANE	1.1	U	U	0.2	1.1	UG/L	
	CARBON TETRACHLORIDE	2.1	U	U	0.16	2.1	UG/L	
	CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	
	CHLOROETHANE	1	U	U	0.3	1	UG/L	
	CHLOROFORM	0.3	U	U	0.15	0.3	UG/L	
	CHLOROMETHANE	1.3	U	U	0.09	1.3	UG/L	
	CIS-1,2-DICHLOROETHENE	1.2	U	U	0.08	1.2	UG/L	
	CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L	
	DIBROMOCHLOROMETHANE	0.5	U	U	0.16	0.5	UG/L	
	DIBROMOFLUOROMETHANE	97	U	U	0.1	0.1	ERCEN	
	DIBROMOMETHANE	2.4	U	U	0.2	2.4	UG/L	
	DICHLORODIFLUOROMETHANI	1	U	U	0.36	1	UG/L	
	ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L	
	HEXAChLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L	
	ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L	
	M.P-XYLENE	1.3	U	U	0.22	1.3	UG/L	
	METHYLENE CHLORIDE	0.64	R	U	0.21	0.3	UG/L	BD%R

6521014

							BS%R
							CV%D
							IC%RSI
	METHYLENE CHLORIDE	0.64	R	U	0.21	0.3	UG/L
	METHYLENE CHLORIDE	0.64	R	U	0.21	0.3	UG/L
	METHYLENE CHLORIDE	0.64	R	U	0.21	0.3	UG/L
	N-BUTYLBENZENE	1.1	U	U	0.11	1.1	UG/L
	N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L
	NAPHTHALENE	0.4	U	U	0.12	0.4	UG/L
	O-XYLENE	1.1	U	U	0.13	1.1	UG/L
	P-ISOPROPYLtolUENE	1.2	U	U	0.09	1.2	UG/L
	SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L
	STYRENE	0.4	U	U	0.12	0.4	UG/L
	TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L
	TETRACHLOROETHENE	1.4	U	U	0.17	1.4	UG/L
	TOLUENE	1.1	U	U	0.14	1.1	UG/L
	TOLUENE-D8	102	U	U	0.1	0.1	ERCEN
	TRANS-1,2-DICHLOROETHENE	0.6	U	U	0.09	0.6	UG/L
	TRANS-1,3-DICHLOROPROPENE	1	U	U	0.17	1	UG/L
	TRICHLOROETHENE	1	U	U	0.1	1	UG/L
	TRICHLOROFLUOROMETHANE	0.8	U	U	0.22	0.8	UG/L
	VINYL CHLORIDE	1.1	U	U	0.16	1.1	UG/L

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA004	1,1,1,2-TETRACHLOROETHANE	5	U	U	1.48	5	UG/L	
	1,1,1-TRICHLOROETHANE	8	U	U	1.3	8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	4	U	U	1.7	4	UG/L	
	1,1,2-TRICHLOROETHANE	10	U	U	1.6	10	UG/L	
	1,1-DICHLOROETHANE	4	U	U	1.1	4	UG/L	
	1,1-DICHLOROETHENE	12	U	U	1.5	12	UG/L	
	1,1-DICHLOROPROPENE	10	U	U	1.4	10	UG/L	
	1,2,3-TRICHLOROBENZENE	3	U	U	1.5	3	UG/L	
	1,2,3-TRICHLOROPROPANE	32	U	U	1.5	32	UG/L	
	1,2,4-TRICHLOROBENZENE	4	U	U	1.3	4	UG/L	
	1,2,4-TRIMETHYLBENZENE	13	U	U	0.9	13	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	26	U	U	2.5	26	UG/L	
	1,2-DIBROMOETHANE	6	U	U	1.9	6	UG/L	
	1,2-DICHLOROBENZENE	3	U	U	1	3	UG/L	
	1,2-DICHLOROETHANE	6	U	U	3.3	6	UG/L	
	1,2-DICHLOROPROPANE	4	U	U	0.9	4	UG/L	
	1,3,5-TRIMETHYLBENZENE	5	U	U	1	5	UG/L	
	1,3-DICHLOROBENZENE	12	U	U	0.5	12	UG/L	
	1,3-DICHLOROPROPANE	4	U	U	1.5	4	UG/L	
	1,4-DICHLOROBENZENE	3	U	U	1.2	3	UG/L	
	1-CHLOROHEXANE	5	U	U	1.4	5	UG/L	
	2,2-DICHLOROPROPANE	35	U	U	3.2	35	UG/L	
	2-CHLOROTOLUENE	4	U	U	1	4	UG/L	
	4-BROMOFLUOROBENZENE	97			1	1	ERCEN	
	4-CHLOROTOLUENE	6	U	U	0.8	6	UG/L	
	BENZENE	4	U	U	1	4	UG/L	
	BROMOBENZENE	3	U	U	0.9	3	UG/L	
	BROMOCHLOROMETHANE	4	U	U	1.8	4	UG/L	
	BROMODICHLOROMETHANE	8	U	U	1	8	UG/L	
	BROMOFORM	12	U	U	1.8	12	UG/L	
	BROMOMETHANE	11	U	U	2	11	UG/L	
	CARBON TETRACHLORIDE	21	U	U	1.6	21	UG/L	
	CHLOROBENZENE	4	U	U	1.2	4	UG/L	
	CHLOROETHANE	10	U	U	3	10	UG/L	

6521015

9711001 SW8260A

Page 6 of 9

CHLOROFORM	3	U	U	1.5	3	UG/L	
CHLOROMETHANE	13	U	U	0.9	13	UG/L	
CIS-1,2-DICHLOROETHENE	33			0.8	12	UG/L	
CIS-1,3-DICHLOROPROPENE	10	U	U	1.1	10	UG/L	
DIBROMOCHLOROMETHANE	5	U	U	1.6	5	UG/L	
DIBROMOFLUOROMETHANE	99			1	1	ERCEN	
DIBROMOMETHANE	24	U	U	2	24	UG/L	
DICHLORODIFLUOROMETHANE	10	U	U	3.6	10	UG/L	
ETHYLBENZENE	6	U	U	1.2	6	UG/L	
HEXACHLOROBUTADIENE	11	U	U	2	11	UG/L	
ISOPROPYLBENZENE	5	U	U	1.3	5	UG/L	
M,P-XYLENE	13	U	U	2.2	13	UG/L	
METHYLENE CHLORIDE	29	R	U	2.1	3	UG/L	IC%RSI
METHYLENE CHLORIDE	29	R	U	2.1	3	UG/L	CV%D
METHYLENE CHLORIDE	29	R	U	2.1	3	UG/L	BD%R
METHYLENE CHLORIDE	29	R	U	2.1	3	UG/L	BS%R
N-BUTYLBENZENE	11	U	U	1.1	11	UG/L	
N-PROPYLBENZENE	4	U	U	0.9	4	UG/L	
NAPHTHALENE	4	U	U	1.2	4	UG/L	
O-XYLENE	11	U	U	1.3	11	UG/L	
P-ISOPROPYLtolUENE	12	U	U	0.9	12	UG/L	
SEC-BUTYLBENZENE	13	U	U	1.2	13	UG/L	
STYRENE	4	U	U	1.2	4	UG/L	
TERT-BUTYLBENZENE	14	U	U	1.3	14	UG/L	
TETRACHLOROETHENE	14	U	U	1.7	14	UG/L	
TOLUENE	11	U	U	1.4	11	UG/L	
TOLUENE-D8	100			1	1	ERCEN	
TRANS-1,2-DICHLOROETHENE	7.5			0.9	6	UG/L	
TRANS-1,3-DICHLOROPROPENE	10	U	U	1.7	10	UG/L	
TRICHLOROETHENE	230			1	10	UG/L	
—TRICHLOROFUOROMETHANE	8	U	U	2.2	8	UG/L	
VINYL CHLORIDE	11	U	U	1.6	11	UG/L	

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA005	1,1,1,2-TETRACHLOROETHANE	5	U	U	1.48	5	UG/L	
	1,1,1-TRICHLOROETHANE	8	U	U	1.3	8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	4	U	U	1.7	4	UG/L	
	1,1,2-TRICHLOROETHANE	10	U	U	1.6	10	UG/L	
	1,1-DICHLOROETHANE	4	U	U	1.1	4	UG/L	
	1,1-DICHLOROETHENE	12	U	U	1.5	12	UG/L	
	1,1-DICHLOROPROPENE	10	U	U	1.4	10	UG/L	
	1,2,3-TRICHLOROBENZENE	3	U	U	1.5	3	UG/L	
	1,2,3-TRICHLOROPROPANE	32	U	U	1.5	32	UG/L	
	1,2,4-TRICHLOROBENZENE	4	U	U	1.3	4	UG/L	
	1,2,4-TRIMETHYLBENZENE	13	U	U	0.9	13	UG/L	
	2-DIBROMO-3-CHLOROPROPAN	26	U	U	2.5	26	UG/L	
	1,2-DIBROMOETHANE	6	U	U	1.9	6	UG/L	
	1,2-DICHLOROBENZENE	3	U	U	1	3	UG/L	
	1,2-DICHLOROETHANE	6	U	U	3.3	6	UG/L	
	1,2-DICHLOROPROPANE	4	U	U	0.9	4	UG/L	
	1,3,5-TRIMETHYLBENZENE	5	U	U	1	5	UG/L	
	1,3-DICHLOROBENZENE	12	U	U	0.5	12	UG/L	
	1,3-DICHLOROPROPANE	4	U	U	1.5	4	UG/L	
	1,4-DICHLOROBENZENE	3	U	U	1.2	3	UG/L	
	1-CHLOROHEXANE	5	U	U	1.4	5	UG/L	

V1.05d
6521016

9711001 SW8260A

Page 7 of 9

2,2-DICHLOROPROPANE	35	U	U	3.2	35	UG/L	
2-CHLOROTOLUENE	4	U	U	1	4	UG/L	
4-BROMOFLUOROBENZENE	98			1	1	ERCEN	
4-CHLOROTOLUENE	6	U	U	0.8	6	UG/L	
BENZENE	4	U	U	1	4	UG/L	
BROMOBENZENE	3	U	U	0.9	3	UG/L	
BROMOCHLOROMETHANE	4	U	U	1.8	4	UG/L	
BROMODICHLOROMETHANE	8	U	U	1	8	UG/L	
BROMOFORM	12	U	U	1.8	12	UG/L	
BROMOMETHANE	11	U	U	2	11	UG/L	
CARBON TETRACHLORIDE	21	U	U	1.6	21	UG/L	
CHLOROBENZENE	4	U	U	1.2	4	UG/L	
CHLOROETHANE	10	U	U	3	10	UG/L	
CHLOROFORM	3	U	U	1.5	3	UG/L	
CHLOROMETHANE	13	U	U	0.9	13	UG/L	
CIS-1,2-DICHLOROETHENE	40			0.8	12	UG/L	
CIS-1,3-DICHLOROPROPENE	10	U	U	1.1	10	UG/L	
DIBROMOCHLOROMETHANE	5	U	U	1.6	5	UG/L	
DIBROMOFLUOROMETHANE	106			1	1	ERCEN	
DIBROMOMETHANE	24	U	U	2	24	UG/L	
DICHLORODIFLUOROMETHANI	10	U	U	3.6	10	UG/L	
ETHYLBENZENE	6	U	U	1.2	6	UG/L	
HEXACHLOROBUTADIENE	11	U	U	2	11	UG/L	
ISOPROPYLBENZENE	5	U	U	1.3	5	UG/L	
M,P-XYLENE	13	U	U	2.2	13	UG/L	
METHYLENE CHLORIDE	37	R	U	2.1	3	UG/L	BD%R
METHYLENE CHLORIDE	37	R	U	2.1	3	UG/L	BS%R
METHYLENE CHLORIDE	37	R	U	2.1	3	UG/L	CV%D
METHYLENE CHLORIDE	37	R	U	2.1	3	UG/L	IC%RSI
N-BUTYLBENZENE	11	U	U	1.1	11	UG/L	
N-PROPYLBENZENE	4	U	U	0.9	4	UG/L	
NAPHTHALENE	4	U	U	1.2	4	UG/L	
O-XYLENE	11	U	U	1.3	11	UG/L	
P-ISOPROPYLtolUENE	12	U	U	0.9	12	UG/L	
SEC-BUTYLBENZENE	13	U	U	1.2	13	UG/L	
STYRENE	4	U	U	1.2	4	UG/L	
TERT-BUTYLBENZENE	14	U	U	1.3	14	UG/L	
TETRACHLOROETHENE	14	U	U	1.7	14	UG/L	
TOLUENE	11	U	U	1.4	11	UG/L	
TOLUENE-D8	101			1	1	ERCEN	
TRANS-1,2-DICHLOROETHENE	16			0.9	6	UG/L	
TRANS-1,3-DICHLOROPROPENE	10	U	U	1.7	10	UG/L	
TRICHLOROETHENE	200			1	10	UG/L	
TRICHLOROFLUOROMETHANE	8	U	U	2.2	8	UG/L	
VINYL CHLORIDE	11	U	U	1.6	11	UG/L	

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not requested
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrx	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Tri p blank
TB<RL	Tri p blank concentration less than RL
TB>RL	Tri p blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

6521019

NAS FW JRB AOC 2**Data Quality Evaluation**

SDG 9711018 Method SW8260A

Reviewer nh Date 2/13/98 Matrix water

Senior Review Vito D'Aurora

Field Samples 3-Water Samples

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
-----------------	------------------	-----------------	------------------	-----------------	------------------

Water

AHA006AB1	AB	AHA007EB1	EB	AHA008TB1	TB
AHA009	N	AHA010	N	AHA010MS1	MS
AHA010SD1	SD	AHA011FD1	FD	AHA012	N
LABQC	BD				

**1. Case Narrative
Items of Interest**

1. Methylene Chloride was detected in the samples at concentrations < 10x the detected concentrations in the method blank; therefore, the data were flagged U. Naphthalene was not detected in the samples.
2. The method blank had Methylene Chloride and Naphthalene detected > the reporting limits.
3. All LCS/LCDs were within acceptance criteria with the exception of Methylene Chloride and Trichloroethene. Trichloroethene exceeded the acceptance criteria in the MS only, but was recovered near the upper limit in the MSD. The recoveries of these compounds were within control limits, which demonstrated the spike outliers in the MS's were due to matrix effects. Due to background levels of Methylene Chloride inaccurate and imprecise results occur.
4. Due to the concentration of target analytes, samples 4 through 7 were analyzed at a higher dilution.
5. Several compounds from the ICV/CCV order curve were within the acceptance limit but exceeded the 15% RSD criteria. These were quantitated using the average response factor due to software problem.

2. Blank Summary

Field Blanks All criteria were met.

6521020

9711018 SW8260A

Page 2 of 12

Method Blanks The method blank had Methylene Chloride and Naphthalene detected > the reporting limits. Samples were all non-detects.

<u>Blank Type</u>	<u>Blank ID</u>	<u>Analyte</u>	<u>Result</u>	<u>ReportLimit</u>	<u>LabFlag</u>	<u>Units</u>
LB	LABQC	NAPHTHALENE	0.45	0.12		UG/L
LB	LABQC	METHYLENE CHLORI	3.5	0.21		UG/L
TB	AHA008TB1	CHLOROFORM	0.43	0.15		UG/L

3. Spikes and Duplicates

Field Duplicates The RPD for Chloroform > criteria. The native and FD were flagged J for positive results.

<u>Analyte</u>	<u>Normal Sample</u>	<u>Result</u>	<u>Field Dupe</u>	<u>Result</u>	<u>RPD</u>	<u>Criteria</u>	<u>Matrix</u>
CHLOROFORM	AHA010	9.8	AHA011FD1	14	35.29	20	WATER

Laboratory Duplicates None

Matrix Spike Trichloroethene exceeded the acceptance criteria in the MS only. The samples were validated with a J flag. Methylene Chloride exceeded criteria in both the MS/MSD. The samples were flagged UJ for non-detects.

Recovery

<u>Matrix</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>Analyte</u>	<u>Recovery</u>	<u>LowerLimit</u>	<u>UpperLimit</u>
WATER	MS	AHA010MS1	METHYLENE CHLORIDE	47	75	125
WATER	MS	-AHA010MS1	TRICHLOROETHENE	144	71	125
WATER	SD	AHA010SD1	METHYLENE CHLORIDE	55	75	125

4. Laboratory Control Sample All LCS/LCDs were within acceptance criteria with the exception of Methylene Chloride. The samples were validated with a J flag since it recovered < the LCL.

<u>Matrix</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>Analyte</u>	<u>Recovery</u>	<u>LowerLimit</u>	<u>UpperLimit</u>
WATER	BS	LABQC	METHYLENE CHLORIDE	56	75	125
WATER	BD	LABQC	METHYLENE CHLORIDE	55	75	125

5. Surrogates All surrogate recoveries were within acceptance criteria.

6. Tuning and Mass Calibration All criteria met.

6521021

9711018 SW8260A

Page 3 of 12

7. Internal Standard

All internal standard recoveries were within acceptance criteria.

8. Calibration Information

Initial Calibration Methylene Chloride was validated with an R flag in the samples for exceeding the %RSD in the ICAL.

<u>Field ID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation Reason</u>
AHA009	METHYLENE CHLORIDE	R	IC%RSD
AHA010	METHYLENE CHLORIDE	R	IC%RSD
AHA011FD1	METHYLENE CHLORIDE	R	IC%RSD
AHA012	METHYLENE CHLORIDE	R	IC%RSD

Continuing Calibration Methylene Chloride was validated with an R flag in the samples for exceeding the %D in the CCV.

<u>Field ID</u>	<u>LabsampleID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation</u>
AHA009	9711018-4	METHYLENE CHLORIDE	R	CV%D
AHA010	9711018-5	METHYLENE CHLORIDE	R	CV%D
AHA011FD1	9711018-6	METHYLENE CHLORIDE	R	CV%D
AHA012	9711018-7	METHYLENE CHLORIDE	R	CV%D

9. Holding Time

Holding times were met.

10. Summary

General Comments

1. All LCS/LCDs were within acceptance criteria with the exception of Methylene Chloride. The samples were validated with a J flag since it recovered below the LCL.
2. Methylene Chloride was validated with an R flag in the samples for exceeding the %RSD in the ICAL and for exceeding the %D in the CCV.
3. The Field Duplicate RPD for Chloroform > criteria. The native and FD were flagged J for positive results.
4. Trichloroethene exceeded the acceptance criteria in the MS only. The samples were validated with a J flag. Methylene Chloride exceeded criteria in both the MS/MSD. The samples were flagged UJ for non-detects.

Data Package Completeness The case narrative referred to the LCS/D in issue #6 and in #7. I believe (based on the contents of the package) that #6 should be referring to the MS/MSD. They were validated as such.

Forms Review/ Items of Interest

1. Methylene Chloride was detected in the samples at concentrations < 10x the detected concentrations in the method blank; therefore, the data were flagged U. Naphthalene was not detected in the samples.
2. Due to the concentration of target analytes, samples 4 - 7 were analyzed at

6521022

9711018 SW8260A

Page 4 of 12

a higher dilution.

COC Review Complete

6521023

9711018 SW8260A

Page 5 of 12

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA009	1,1,1,2-TETRACHLOROETHANE	10	U	U	2.96	10	UG/L	
	1,1,1-TRICHLOROETHANE	16	U	U	2.6	16	UG/L	
	1,1,2,2-TETRACHLOROETHANE	8	U	U	3.4	8	UG/L	
	1,1,2-TRICHLOROETHANE	20	U	U	3.2	20	UG/L	
	1,1-DICHLOROETHANE	8	U	U	2.2	8	UG/L	
	1,1-DICHLOROETHENE	24	U	U	3	24	UG/L	
	1,1-DICHLOROPROPENE	20	U	U	2.8	20	UG/L	
	1,2,3-TRICHLOROBENZENE	6	U	U	3	6	UG/L	
	1,2,3-TRICHLOROPROPANE	64	U	U	3	64	UG/L	
	1,2,4-TRICHLOROBENZENE	8	U	U	2.6	8	UG/L	
	1,2,4-TRIMETHYLBENZENE	350			1.8	26	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	52	U	U	5	52	UG/L	
	1,2-DIBROMOETHANE	12	U	U	3.8	12	UG/L	
	1,2-DICHLOROBENZENE	6	U	U	2	6	UG/L	
	1,2-DICHLOROETHANE	12	U	U	6.6	12	UG/L	
	1,2-DICHLOROPROPANE	8	U	U	1.8	8	UG/L	
	1,3,5-TRIMETHYLBENZENE	10	U	U	2	10	UG/L	
	1,3-DICHLOROBENZENE	24	U	U	1	24	UG/L	
	1,3-DICHLOROPROPANE	8	U	U	3	8	UG/L	
	1,4-DICHLOROBENZENE	6	U	U	2.4	6	UG/L	
	1-CHLOROHEXANE	10	U	U	2.8	10	UG/L	
	2,2-DICHLOROPROPANE	70	U	U	6.4	70	UG/L	
	2-CHLOROTOLUENE	8	U	U	2	8	UG/L	
	4-BROMOFLUOROBENZENE	99			2	2	ERCEN	
	4-CHLOROTOLUENE	12	U	U	1.6	12	UG/L	
	BENZENE	8	U	U	2	8	UG/L	
	BROMOBENZENE	6	U	U	1.8	6	UG/L	
	BROMOCHLOROMETHANE	8	U	U	3.6	8	UG/L	
	BROMODICHLOROMETHANE	16	U	U	2	16	UG/L	
	BROMOFORM	24	U	U	3.6	24	UG/L	
	BROMOMETHANE	22	U	U	4	22	UG/L	
	CARBON TETRACHLORIDE	42	U	U	3.2	42	UG/L	
	CHLOROBENZENE	8	U	U	2.4	8	UG/L	
	CHLOROETHANE	20	U	U	6	20	UG/L	
	CHLOROFORM	7.6			3	6	UG/L	
	CHLOROMETHANE	26	U	U	1.8	26	UG/L	
	CIS-1,2-DICHLOROETHENE	24	U	U	1.6	24	UG/L	
	CIS-1,3-DICHLOROPROPENE	20	U	U	2.2	20	UG/L	
	DIBROMOCHLOROMETHANE	10	U	U	3.2	10	UG/L	
	DIBROMOFLUOROMETHANE	101			2	2	ERCEN	
	DIBROMOMETHANE	48	U	U	4	48	UG/L	
	DICHLORODIFLUOROMETHANE	20	U	U	7.2	20	UG/L	
	ETHYLBENZENE	12	U	U	2.4	12	UG/L	
	HEXAChLOROBUTADIENE	22	U	U	4	22	UG/L	
	ISOPROPYLBENZENE	7.2	F	F	2.6	10	UG/L	
	M,P-XYLENE	26	U	U	4.4	26	UG/L	
	METHYLENE CHLORIDE	30	R	U	4.2	6	UG/L	BD%R

6521024

9711018 SW8260A

Page 6 of 12

METHYLENE CHLORIDE	30	R	U	4.2	6	UG/L	BS%R
METHYLENE CHLORIDE	30	R	U	4.2	6	UG/L	CV%D
METHYLENE CHLORIDE	30	R	U	4.2	6	UG/L	IC%RSI
N-BUTYLBENZENE	22	U	U	2.2	22	UG/L	
N-PROPYLBENZENE	8	U	U	1.8	8	UG/L	
NAPHTHALENE	8	U	U	2.4	8	UG/L	
O-XYLENE	22	U	U	2.6	22	UG/L	
P-ISOPROPYLtolUENE	24	U	U	1.8	24	UG/L	
SEC-BUTYLBENZENE	11	F	F	2.4	26	UG/L	
STYRENE	8	U	U	2.4	8	UG/L	
TERT-BUTYLBENZENE	28	U	U	2.6	28	UG/L	
TETRACHLOROETHENE	28	U	U	3.4	28	UG/L	
TOLUENE	22	U	U	2.8	22	UG/L	
TOLUENE-D8	101	—	—	2	2	ERCEN	
TRANS-1,2-DICHLOROETHENE	12	U	U	1.8	12	UG/L	
TRANS-1,3-DICHLOROPROPENE	20	U	U	3.4	20	UG/L	
TRICHLOROETHENE	20	U	U	2	20	UG/L	
TRICHLOROFLUOROMETHANE	16	U	U	4.4	16	UG/L	
VINYL CHLORIDE	22	U	U	3.2	22	UG/L	

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA010	1,1,1,2-TETRACHLOROETHANE	10	U	U	2.96	10	UG/L	
	1,1,1-TRICHLOROETHANE	16	U	U	2.6	16	UG/L	
	1,1,2,2-TETRACHLOROETHANE	8	U	U	3.4	8	UG/L	
	1,1,2-TRICHLOROETHANE	20	U	U	3.2	20	UG/L	
	1,1-DICHLOROETHANE	8	U	U	2.2	8	UG/L	
	1,1-DICHLOROETHENE	24	U	U	3	24	UG/L	
	1,1-DICHLOROPROPENE	20	U	U	2.8	20	UG/L	
	1,2,3-TRICHLOROBENZENE	6	—	U	3	6	UG/L	
	1,2,3-TRICHLOROPROPANE	64	U	U	3	64	UG/L	
	1,2,4-TRICHLOROBENZENE	8	U	U	2.6	8	UG/L	
	1,2,4-TRIMETHYLBENZENE	26	—	U	1.8	26	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	52	U	U	5	52	UG/L	
	1,2-DIBROMOETHANE	12	U	U	3.8	12	UG/L	
	1,2-DICHLOROBENZENE	6	U	U	2	6	UG/L	
	1,2-DICHLOROETHANE	12	U	U	6.6	12	UG/L	
	1,2-DICHLOROPROPANE	8	U	U	1.8	8	UG/L	
	1,3,5-TRIMETHYLBENZENE	10	U	U	2	10	UG/L	
	1,3-DICHLOROBENZENE	24	U	U	1	24	UG/L	
	1,3-DICHLOROPROPANE	8	U	U	3	8	UG/L	
	1,4-DICHLOROBENZENE	6	U	U	2.4	6	UG/L	
	1-CHLOROHEXANE	10	U	U	2.8	10	UG/L	
	2,2-DICHLOROPROPANE	70	U	U	6.4	70	UG/L	
	2-CHLOROTOLUENE	8	U	U	2	8	UG/L	
	4-BROMOFUOROBENZENE	97	—	—	2	2	ERCEN	
	4-CHLOROTOLUENE	12	U	U	1.6	12	UG/L	
	BENZENE	8	U	U	2	8	UG/L	
	BROMOBENZENE	6	U	U	1.8	6	UG/L	
	BROMOCHLOROMETHANE	8	U	U	3.6	8	UG/L	
	BROMODICHLOROMETHANE	16	U	U	2	16	UG/L	
	BROMOFORM	24	U	U	3.6	24	UG/L	
	BROMOMETHANE	22	U	U	4	22	UG/L	
	CARBON TETRACHLORIDE	42	U	U	3.2	42	UG/L	
	CHLOROBENZENE	8	U	U	2.4	8	UG/L	
	CHLOROETHANE	20	U	U	6	20	UG/L	

6521025

9711018 SW8260A

Page 7 of 12

CHLOROFORM	9.8	J		3	6	UG/L	FD>RPI
CHLOROMETHANE	26	U	U	1.8	26	UG/L	
CIS-1,2-DICHLOROETHENE	89			1.6	24	UG/L	
CIS-1,3-DICHLOROPROPENE	20	U	U	2.2	20	UG/L	
DIBROMOCHLOROMETHANE	10	U	U	3.2	10	UG/L	
DIBROMOFLUOROMETHANE	103			2	2	ERCEN	
DIBROMOMETHANE	48	U	U	4	48	UG/L	
DICHLORODIFLUOROMETHANE	20	U	U	7.2	20	UG/L	
ETHYLBENZENE	12	U	U	2.4	12	UG/L	
HEXA-CHLOROBUTADIENE	22	U	U	4	22	UG/L	
ISOPROPYLBENZENE	10	U	U	2.6	10	UG/L	
M,P-XYLENE	26	U	U	4.4	26	UG/L	
METHYLENE CHLORIDE	24	R	U	4.2	6	UG/L	BD%R
METHYLENE CHLORIDE	24	R	U	4.2	6	UG/L	BS%R
METHYLENE CHLORIDE	24	R	U	4.2	6	UG/L	CV%D
METHYLENE CHLORIDE	24	R	U	4.2	6	UG/L	IC%RSI
N-BUTYLBENZENE	22	U	U	2.2	22	UG/L	
N-PROPYLBENZENE	8	U	U	1.8	8	UG/L	
NAPHTHALENE	8	U	U	2.4	8	UG/L	
O-XYLENE	22	U	U	2.6	22	UG/L	
P-ISOPROPYLTOLUENE	24	U	U	1.8	24	UG/L	
SEC-BUTYLBENZENE	26	U	U	2.4	26	UG/L	
STYRENE	8	U	U	2.4	8	UG/L	
TERT-BUTYLBENZENE	28	U	U	2.6	28	UG/L	
TETRA-CHLOROETHENE	28	U	U	3.4	28	UG/L	
TOLUENE	22	U	U	2.8	22	UG/L	
TOLUENE-D8	97			2	2	ERCEN	
TRANS-1,2-DICHLOROETHENE	12	U	U	1.8	12	UG/L	
TRANS-1,3-DICHLOROPROPENE	20	U	U	3.4	20	UG/L	
TRICHLOROETHENE	320	J		2	20	UG/L	MS%R
TRICHLOROFUOROMETHANE	16	U	U	4.4	16	UG/L	
VINYL CHLORIDE	22	U	—U	3.2	22	UG/L	

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA011FD1	1,1,1,2-TETRA-CHLOROETHANE	10	U	U	2.96	10	UG/L	
	1,1,1-TRICHLOROETHANE	16	U	U	2.6	16	UG/L	
	1,1,2,2-TETRA-CHLOROETHANE	8	U	U	3.4	8	UG/L	
	1,1,2-TRICHLOROETHANE	20	U	U	3.2	20	UG/L	
	1,1-DICHLOROETHANE	8	U	U	2.2	8	UG/L	
	1,1-DICHLOROETHENE	24	U	U	3	24	UG/L	
	1,1-DICHLOROPROPENE	20	U	U	2.8	20	UG/L	
	1,2,3-TRICHLOROBENZENE	6	U	U	3	6	UG/L	
	1,2,3-TRICHLOROPROPANE	64	U	U	3	64	UG/L	
	1,2,4-TRICHLOROBENZENE	8	U	U	2.6	8	UG/L	
	1,2,4-TRIMETHYLBENZENE	26	U	U	1.8	26	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	52	U	U	5	52	UG/L	
	1,2-DIBROMOETHANE	12	U	U	3.8	12	UG/L	
	1,2-DICHLOROBENZENE	6	U	U	2	6	UG/L	
	1,2-DICHLOROETHANE	12	U	U	6.6	12	UG/L	
	1,2-DICHLOROPROPANE	8	U	U	1.8	8	UG/L	
	1,3,5-TRIMETHYLBENZENE	10	U	U	2	10	UG/L	
	1,3-DICHLOROBENZENE	24	U	U	1	24	UG/L	
	1,3-DICHLOROPROPANE	8	U	U	3	8	UG/L	
	1,4-DICHLOROBENZENE	6	U	U	2.4	6	UG/L	
	1-CHLOROHEXANE	10	U	U	2.8	10	UG/L	

6521026

9711018 SW8260A

Page 8 of 12

2,2-DICHLOROPROPANE	70	U	U	6.4	70	UG/L
2-CHLOROTOLUENE	8	U	U	2	8	UG/L
4-BROMOFLUOROBENZENE	96			2	2	ERCEN
4-CHLOROTOLUENE	12	U	U	1.6	12	UG/L
BENZENE	8	U	U	2	8	UG/L
BROMOBENZENE	6	U	U	1.8	6	UG/L
BROMOCHLOROMETHANE	8	U	U	3.6	8	UG/L
BROMODICHLOROMETHANE	16	U	U	2	16	UG/L
BROMOFORM	24	U	U	3.6	24	UG/L
BROMOMETHANE	22	U	U	4	22	UG/L
CARBON TETRACHLORIDE	42	U	U	3.2	42	UG/L
CHLOROBENZENE	8	U	U	2.4	8	UG/L
CHLOROETHANE	20	U	U	6	20	-UG/L
CHLOROFORM	14	J		3	6	UG/L
CHLOROMETHANE	26	U	U	1.8	26	UG/L
CIS-1,2-DICHLOROETHENE	92			1.6	24	UG/L
CIS-1,3-DICHLOROPROPENE	20	U	U	2.2	20	UG/L
DIBROMOCHLOROMETHANE	10	U	U	3.2	10	UG/L
DIBROMOFLUOROMETHANE	107			2	2	ERCEN
DIBROMOMETHANE	48	U	U	4	48	UG/L
DICHLORODIFLUOROMETHANI	20	U	U	7.2	20	UG/L
ETHYLBENZENE	12	U	U	2.4	12	UG/L
HEXACHLOROBUTADIENE	22	U	U	4	22	UG/L
ISOPROPYLBENZENE	10	U	U	2.6	10	UG/L
M,P-XYLENE	26	U	U	4.4	26	UG/L
METHYLENE CHLORIDE	23	R	U	4.2	6	UG/L
METHYLENE CHLORIDE	23	R	U	4.2	6	UG/L
METHYLENE CHLORIDE	23	R	U	4.2	6	UG/L
METHYLENE CHLORIDE	23	R	U	4.2	6	UG/L
N-BUTYLBENZENE	22	U	U	2.2	22	UG/L
N-PROPYLBENZENE	8	U	U	1.8	8	UG/L
NAPHTHALENE	8	U	U	2.4	8	UG/L
O-XYLENE	22	U	U	2.6	22	UG/L
P-ISOPROPYLtolUENE	24	U	U	1.8	24	UG/L
SEC-BUTYLBENZENE	26	U	U	2.4	26	UG/L
STYRENE	8	U	U	2.4	8	UG/L
TERT-BUTYLBENZENE	28	U	U	2.6	28	UG/L
TETRAChLOROETHENE	28	U	U	3.4	28	UG/L
TOLUENE	22	U	U	2.8	22	UG/L
TOLUENE-D8	98			2	2	ERCEN
TRANS-1,2-DICHLOROETHENE	12	U	U	1.8	12	UG/L
TRANS-1,3-DICHLOROPROPENE	20	U	U	3.4	20	UG/L
TRICHLOROETHENE	290	J		2	20	UG/L
TRICHLOROFUOROMETHANE	16	U	U	4.4	16	UG/L
VINYL CHLORIDE	22	U	U	3.2	22	UG/L

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA012	1,1,1,2-TETRAChLOROETHANE	10	U	U	2.96	10	UG/L	
	1,1,1-TRICHLOROETHANE	16	U	U	2.6	16	UG/L	
	1,1,2,2-TETRAChLOROETHANE	8	U	U	3.4	8	UG/L	
	1,1,2-TRICHLOROETHANE	20	U	U	3.2	20	UG/L	
	1,1-DICHLOROETHANE	8	U	U	2.2	8	UG/L	
	1,1-DICHLOROETHENE	24	U	U	3	24	UG/L	
	1,1-DICHLOROPROPENE	20	U	U	2.8	20	UG/L	
	1,2,3-TRICHLOROBENZENE	6	U	U	3	6	UG/L	

1,2,3-TRICHLOROPROPANE	64	U	U	3	64	UG/L
1,2,4-TRICHLOROBENZENE	8	U	U	2.6	8	UG/L
1,2,4-TRIMETHYLBENZENE	26	U	U	1.8	26	UG/L
2-DIBROMO-3-CHLOROPROPANE	52	U	U	5	52	UG/L
1,2-DIBROMOETHANE	12	U	U	3.8	12	UG/L
1,2-DICHLOROBENZENE	6	U	U	2	6	UG/L
1,2-DICHLOROETHANE	12	U	U	6.6	12	UG/L
1,2-DICHLOROPROPANE	8	U	U	1.8	8	UG/L
1,3,5-TRIMETHYLBENZENE	10	U	U	2	10	UG/L
1,3-DICHLOROBENZENE	24	U	U	1	24	UG/L
1,3-DICHLOROPROPANE	8	U	U	3	8	UG/L
1,4-DICHLOROBENZENE	6	U	U	2.4	6	UG/L
1-CHLOROHEXANE	10	U	U	2.8	10	UG/L
2,2-DICHLOROPROPANE	70	U	U	6.4	70	UG/L
2-CHLOROTOLUENE	8	U	U	2	8	UG/L
4-BROMOFLUOROBENZENE	101			2	2	ERCEN
4-CHLOROTOLUENE	12	U	U	1.6	12	UG/L
BENZENE	8	U	U	2	8	UG/L
BROMOBENZENE	6	U	U	1.8	6	UG/L
BROMOCHLOROMETHANE	8	U	U	3.6	8	UG/L
BROMODICHLOROMETHANE	16	U	U	2	16	UG/L
BROMOFORM	24	U	U	3.6	24	UG/L
BROMOMETHANE	22	U	U	4	22	UG/L
CARBON TETRACHLORIDE	42	U	U	3.2	42	UG/L
CHLOROBENZENE	8	U	U	2.4	8	UG/L
CHLOROETHANE	20	U	U	6	20	UG/L
CHLOROFORM	10			3	6	UG/L
CHLOROMETHANE	26	U	U	1.8	26	UG/L
CIS-1,2-DICHLOROETHENE	94			1.6	24	UG/L
CIS-1,3-DICHLOROPROPENE	20	U	U	2.2	20	UG/L
DIBROMOCHLOROMETHANE	10	U	U	3.2	10	UG/L
DIBROMOFLUOROMETHANE	104			2	2	ERCEN
DIBROMOMETHANE	48	U	U	4	48	UG/L
DICHLORODIFLUOROMETHANE	20	U	U	7.2	20	UG/L
ETHYLBENZENE	12	U	U	2.4	12	UG/L
HEXACHLOROBUTADIENE	22	U	U	4	22	UG/L
ISOPROPYLBENZENE	10	U	U	2.6	10	UG/L
M,P-XYLENE	26	U	U	4.4	26	UG/L
METHYLENE CHLORIDE	30	R	U	4.2	6	UG/L
METHYLENE CHLORIDE	30	R	U	4.2	6	UG/L
METHYLENE CHLORIDE	30	R	U	4.2	6	UG/L
METHYLENE CHLORIDE	30	R	U	4.2	6	UG/L
N-BUTYLBENZENE	22	U	U	2.2	22	UG/L
N-PROPYLBENZENE	8	U	U	1.8	8	UG/L
NAPHTHALENE	8	U	U	2.4	8	UG/L
O-XYLENE	22	U	U	2.6	22	UG/L
P-ISOPROPYLTOLUENE	24	U	U	1.8	24	UG/L
SEC-BUTYLBENZENE	26	U	U	2.4	26	UG/L
STYRENE	8	U	U	2.4	8	UG/L
TERT-BUTYLBENZENE	28	U	U	2.6	28	UG/L
TETRACHLOROETHENE	28	U	U	3.4	28	UG/L
TOLUENE	22	U	U	2.8	22	UG/L
TOLUENE-D8	98			2	2	ERCEN
TRANS-1,2-DICHLOROETHENE	67			1.8	12	UG/L
TRANS-1,3-DICHLOROPROPENE	20	U	U	3.4	20	UG/L
TRICHLOROETHENE	180	J		2	20	UG/L
						MS%R

6521028

9711018-SW8260A

Page 10 of 12

TRICHLOROFLUOROMETHANE	16	U	U	4.4	16	UG/L
VINYL CHLORIDE	22	U	U	3.2	22	UG/L

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlocal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

6521030

9711018 SW8260A

Page 12 of 12

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trp blank
TB<RL	Trp blank concentration less than RL
TB>RL	Trp blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J-flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL)

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

6521031



CH2MHILL

NAS FW JRB AOC 2

Data Quality Evaluation

SDG 9711193

Method SW9060

Reviewer nh

Date 2/26/98

Matrix water

Senior Review Vito D'Aurora

Field Samples None

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
-----------------	------------------	-----------------	------------------	-----------------	------------------

Water

AHA014EB1 EB

1. Case Narrative

Items of Interest

1. All blanks were reported < the RL.
2. An MS/MSD were extracted and analyzed with this batch on a sample from another client.

2. Blank Summary

Field Blanks Total Organic Carbon was not detected in the equipment blank.

Method Blanks All blanks were reported < the RL.

3. Spikes and Duplicates

Field Duplicates None

Laboratory Duplicates RPD criteria met.

6521032
9711193 SW9060

Page 2 of 6

Matrix Spike An MS/MSD were extracted and analyzed with this batch on a sample from another client. Not validated.

4. Laboratory Control Sample None

5. Surrogates Not applicable.

6. Tuning and Mass Calibration Not applicable.

7. Internal Standard Not applicable.

8. Calibration Information

Initial Calibration All criteria were met.

Continuing Calibration All criteria were met.

9. Holding Time Holding times were met.

10. Summary

General Comments No flagging necessary.

Data Package Completeness

1. The soil TOC analysis will come in another SDG from RECRA Labnet incorporated into a Paragon package.
2. No LCS was provided.
3. One soil analysis (AHA015) from SDG 9802049 will be validated with this water EB.
4. An MS/MSD were extracted and analyzed with this batch on a sample from

another client.

Forms Review/ Items of Interest	No items to note.
COC Review	The soil TOC analysis will come in another SDG from RECRA Labnet incorporated into a Paragon package. One soil analysis (AHA015) from SDG 9802049 will be validated with this water EB.

6521034

9711193 SW9060

Page 4 of 6

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range.
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

6521036
9711193 SW9060

Page 6 of 6

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFlag	Lab R flag removed; Re-analysis confirmed-matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

6521037

NAS FW JRB AOC 2**Data Quality Evaluation****CH2MHILL****SDG 9711193****Method SW8260A**

Reviewer nh

Date 2/17/98

Matrix water and soil

Senior Review Vito D'Aurora

Field Samples**2-Soil Samples**

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
Soil					
AHA015	N	AHA015MS1	MS	AHA015SD1	SD
AHA016	N	LABQC	BD		
Water					
AHA013TB1	TB	AHA014EB1	EB	LABQC	BD

**1. Case Narrative
Items of Interest**

- Both the water and soil method blanks had Methylene Chloride detected > the reporting limit. This compound was detected in samples 2-4 below the calculated value, so the data were flagged U.
- All water LCS/LCD recoveries and RPDs were within acceptance criteria with the exception of Methylene Chloride in the LCD. All soil LCS/LCD recoveries and RPDs were within acceptance criteria.
- Water MS/MSDs could not be performed due to insufficient volume. All soil MS/MSD recoveries and RPDs were within acceptance criteria.
- Several compounds from the ICV/CCV order curve were within the acceptance limit but exceeded the 15% RSD criteria. These were quantitated using the average response factor due to software problem.

2. Blank Summary**Field Blanks** All criteria were met.**Method Blanks** Both the water and soil method blanks had Methylene Chloride detected > the reporting limit. Samples were all non-detects.

6521038.
9711193 SW8260A

Page 2 of 9

<u>Blank Type</u>	<u>Blank ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Report Limit</u>	<u>LabFlag</u>	<u>Units</u>
LB	LABQC	METHYLENE CHLORI	0.006	0.00021		MG/KG
LB	LABQC	METHYLENE CHLORI	2.8	0.21		UG/L

3. Spikes and Duplicates

Field Duplicates None

Laboratory Duplicates None

Matrix Spike 1. Water MS/MSDs could not be performed due to insufficient volume.
2. The soil Methylene Chloride MS/MSD recoveries were < the LCL criteria. The samples were validated with a UJ flag for non-detects. The soil Dichlorodifluoromethane RPD was > the UCL; however, the samples were all non-detects and not validated.

MS RPD

<u>Analyte</u>	<u>Spike</u>	<u>Result</u>	<u>Dupe</u>	<u>Result</u>	<u>RPD</u>	<u>Criteria</u>	<u>Matrix</u>
DICHLORODIFLU	MS	120	SD	67	56.68	30	SOIL

4. Laboratory Control Sample

All water LCS/LCD recoveries and RPDs were within acceptance criteria with the exception of Methylene Chloride and 1,2-Dibromomethane in the LCD. These were > the UCL, but since the samples were all non-detects and were not validated.

<u>Matrix</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>Analyte</u>	<u>Recovery</u>	<u>LowerLimit</u>	<u>UpperLimit</u>
WATER	BD	LABQC	1,2-DIBROMOETHANE	126	75	125
WATER	BD	LABQC	METHYLENE CHLORIDE	128	75	125

5. Surrogates

All surrogate recoveries were within acceptance criteria.

6. Tuning and Mass Calibration

All criteria met.

7. Internal Standard

All internal standard recoveries were within acceptance criteria.

8. Calibration Information

101529
6521039

9711193 SW8260A

Page 3 of 9

- Initial Calibration**
1. Methylene Chloride from the 11/12/97 water ICAL exceeded the 15% RSD criteria. The TB or EB were not validated.
 2. Methylene Chloride from the 11/24/97 soil ICAL exceeded the 15% RSD criteria. The affected samples were flagged R.

<u>Field ID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation Reason</u>
AHA015	METHYLENE CHLORIDE	R	IC%RSD
AHA016	METHYLENE CHLORIDE	R	IC%RSD

- Continuing Calibration**
1. Several compounds from the 11/21/97 water CCV fell above the +/- 25% expected value. The TB or EB were not validated.
 2. There was no soil CCV needed in the package since the ICAL was run immediately before the samples and the CCV run after. The second source was used as a verification.
 3. 1-Chlorohexane and Dichlorodifluoromethane were not listed on the 2nd source CCV probably due to not being detected or co-elution. These analytes were flagged R on the soil sample.
 4. Fourteen analytes exceeded %D criteria on the 2nd source CCV and were flagged R.

<u>Field ID</u>	<u>LabsampleID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation</u>
AHA015	9711193-3	1-CHLOROHEXANE	R	CCVMIS:
AHA015	9711193-3	DICHLORODIFLUOROMETHANE	R	CCVMIS:
AHA016	9711193-4	1-CHLOROHEXANE	R	CCVMIS:
AHA016	9711193-4	DICHLORODIFLUOROMETHANE	R	CCVMIS:

9. Holding Time

Holding times were met.

10. Summary

- General Comments**
1. Both the water and soil method blanks had Methylene Chloride detected > the reporting limit. This compound was detected in samples 2-4 < the calculated value, so the data were flagged U and not validated.
 2. All water LCS/LCD recoveries and RPDs were within acceptance criteria with the exception of Methylene Chloride and 1,2-Dibromomethane in the LCD. These were > the UCL, but since the samples were all non-detects, they were not validated.
 3. The soil Methylene Chloride MS/MSD recoveries were < the LCL criteria. The samples were validated with a UJ flag for non-detects. The soil Dichlorodifluoromethane RPD was > the UCL; however, the samples were all non-detects and not validated.
 4. Methylene Chloride was validated with an R flag in the samples for exceeding the %RSD in the soil ICAL.
 5. 1-Chlorohexane and Dichlorodifluoromethane were not listed on the 2nd source CCV probably due to not being detected or co-elution. These analytes were flagged R on the soil sample.
 6. Fourteen analytes exceeded %D criteria on the 2nd source CCV and were flagged R.

Data Package Completeness Form 7 for the soil CCV is missing from the package. Requested of Lori on 2/26/98. This Form is not needed per Paragon. See explanation under the CCV. Second source is used as a verification.

6521040

9711193 SW8260A

Page 4 of 9

**Forms Review/ Items of
Interest**

Methylene Chloride was detected in samples 2-4 below the calculated value, so the data were flagged U.

COC Review

The requested MS/MSD could not be performed due to insufficient sample volume. An LCS/LCD were run instead.

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA015	1,1,1,2-TETRACHLOROETHANE	0.0031	U	U	0.00015	0.0031	MG/KG	
	1,1,1-TRICHLOROETHANE	0.0042	U	U	0.00013	0.0042	MG/KG	
	1,1,2,2-TETRACHLOROETHANE	0.0021	R	U	0.00017	0.0021	MG/KG	SSCCV%
	1,1,2-TRICHLOROETHANE	0.0052	U	U	0.00016	0.0052	MG/KG	
	1,1-DICHLOROETHANE	0.0021	U	U	0.00011	0.0021	MG/KG	
	1,1-DICHLOROETHENE	0.0063	U	U	0.00015	0.0063	MG/KG	
	1,1-DICHLOROPROPENE	0.0052	U	U	0.00014	0.0052	MG/KG	
	1,2,3-TRICHLOROBENZENE	0.0021	R	U	0.00015	0.0021	MG/KG	SSCCV%
	1,2,3-TRICHLOROPROPANE	0.021	U	U	0.00015	0.021	MG/KG	
	1,2,4-TRICHLOROBENZENE	0.0021	R	U	0.00013	0.0021	MG/KG	SSCCV%
	1,2,4-TRIMETHYLBENZENE	0.0073	U	U	0.00009	0.0073	MG/KG	
	2-DIBROMO-3-CHLOROPROPANE	0.01	R	U	0.00025	0.01	MG/KG	SSCCV%
	1,2-DIBROMOETHANE	0.0031	R	U	0.00019	0.0031	MG/KG	SSCCV%
	1,2-DICHLOROBENZENE	0.0021	U	U	0.0001	0.0021	MG/KG	
	1,2-DICHLOROETHANE	0.0031	U	U	0.00033	0.0031	MG/KG	
	1,2-DICHLOROPROPANE	0.0021	U	U	0.00009	0.0021	MG/KG	
	1,3,5-TRIMETHYLBENZENE	0.0031	U	U	0.0001	0.0031	MG/KG	
	-1,3-DICHLOROBENZENE	0.0063	U	U	0.00005	0.0063	MG/KG	
	1,3-DICHLOROPROPANE	0.0021	U	U	0.00015	0.0021	MG/KG	
	1,4-DICHLOROBENZENE	0.0021	U	U	0.00012	0.0021	MG/KG	
	1-CHLOROHEXANE	0.0031	R	U	0.00014	0.0031	MG/KG	CCVMISS
	2,2-DICHLOROPROPANE	0.021	U	U	0.00032	0.021	MG/KG	
	2-CHLOROTOLUENE	0.0021	U	U	0.0001	0.0021	MG/KG	
	4-BROMOFLUOROBENZENE	101			0.00313	0.00313	ERCEN	
	4-CHLOROTOLUENE	0.0031	U	U	0.00008	0.0031	MG/KG	
	BENZENE	0.0021	U	U	0.0001	0.0021	MG/KG	
	BROMOBENZENE	0.0021	U	U	0.00009	0.0021	MG/KG	
	BROMOCHLOROMETHANE	0.0021	U	U	0.00018	0.0021	MG/KG	
	BROMODICHLOROMETHANE	0.0042	U	U	0.0001	0.0042	MG/KG	
	BROMOFORM	0.0063	R	U	0.00018	0.0063	MG/KG	SSCCV%
	BROMOMETHANE	0.0052	R	U	0.0002	0.0052	MG/KG	SSCCV%
	CARBON TETRACHLORIDE	0.01	U	U	0.00016	0.01	MG/KG	
	CHLOROBENZENE	0.0021	U	U	0.00012	0.0021	MG/KG	
	CHLOROETHANE	0.0052	R	U	0.0003	0.0052	MG/KG	SSCCV%
	CHLOROFORM	0.0021	U	U	0.00015	0.0021	MG/KG	
	CHLOROMETHANE	0.0073	R	U	0.00009	0.0073	MG/KG	SSCCV%
	CIS-1,2-DICHLOROETHENE	0.0063	U	U	0.00008	0.0063	MG/KG	
	CIS-1,3-DICHLOROPROPENE	0.0052	U	U	0.00011	0.0052	MG/KG	
	DIBROMOCHLOROMETHANE	0.0031	U	U	0.00016	0.0031	MG/KG	
	DIBROMOFLUOROMETHANE	98			0.00313	0.00313	ERCEN	
	DIBROMOMETHANE	0.01	U	U	0.0002	0.01	MG/KG	
	DICHLORODIFLUOROMETHANE	0.0052	R	U	0.00036	0.0052	MG/KG	CCVMISS
	ETHYLBENZENE	0.0031	U	U	0.00012	0.0031	MG/KG	
	HEXACHLOROBUTADIENE	0.0052	U	U	0.0002	0.0052	MG/KG	
	ISOPROPYLBENZENE	0.0083	U	U	0.00013	0.0083	MG/KG	
	M,P-XYLENE	0.0073	U	U	0.00022	0.0073	MG/KG	
	METHYLENE CHLORIDE	0.007	R	U	0.00021	0.0021	MG/KG	IC%RSI

6521042

9711193 SW8260A

Page 6 of 9

METHYLENE CHLORIDE	0.007	R	U	0.00021	0.0021	MG/KG	SSCCV%
N-BUTYLBENZENE	0.0052	U	U	0.00011	0.0052	MG/KG	
N-PROPYLBENZENE	0.0021	U	U	0.00009	0.0021	MG/KG	
NAPHTHALENE	0.0021	R	U	0.00012	0.0021	MG/KG	SSCCV%
O-XYLENE	0.0052	U	U	0.00013	0.0052	MG/KG	
P-ISOPROPYLTOluENE	0.0063	U	U	0.00009	0.0063	MG/KG	
SEC-BUTYLBENZENE	0.0073	U	U	0.00012	0.0073	MG/KG	
STYRENE	0.0021	U	U	0.00012	0.0021	MG/KG	
TERT-BUTYLBENZENE	0.0073	U	U	0.00013	0.0073	MG/KG	
TETRACHLOROETHENE	0.0073	U	U	0.00017	0.0073	MG/KG	
TOLUENE	0.0052	U	U	0.00014	0.0052	MG/KG	
TOLUENE-D8	100			0.00313	0.00313	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.0031	U	U	0.00009	0.0031	MG/KG	
TRANS-1,3-DICHLOROPROPENE	0.0052	U	U	0.00017	0.0052	MG/KG	
TRICHLOROETHENE	0.01	R	U	0.0001	0.01	MG/KG	SSCCV%
TRICHLOROFUOROMETHANE	0.0042	R	U	0.00022	0.0042	MG/KG	SSCCV%
VINYL CHLORIDE	0.0094	R	U	0.00016	0.0094	MG/KG	SSCCV%

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA016	1,1,1,2-TETRACHLOROETHANE	0.0034	U	U	0.00015	0.0034	MG/KG	
	1,1,1-TRICHLOROETHANE	0.0045	U	U	0.00013	0.0045	MG/KG	
	1,1,2,2-TETRACHLOROETHANE	0.0023	R	U	0.00017	0.0023	MG/KG	SSCCV%
	1,1,2-TRICHLOROETHANE	0.0057	U	U	0.00016	0.0057	MG/KG	
	1,1-DICHLOROETHANE	0.0023	U	U	0.00011	0.0023	MG/KG	
	1,1-DICHLOROETHENE	0.0068	U	U	0.00015	0.0068	MG/KG	
	1,1-DICHLOROPROPENE	0.0057	U	U	0.00014	0.0057	MG/KG	
	1,2,3-TRICHLOROBENZENE	0.0023	R	U	0.00015	0.0023	MG/KG	SSCCV%
	1,2,3-TRICHLOROPROPANE	0.023	U	U	0.00015	0.023	MG/KG	
	1,2,4-TRICHLOROBENZENE	0.0023	R	U	0.00013	0.0023	MG/KG	SSCCV%
	1,2,4-TRIMETHYLBENZENE	0.008	-	U	0.00009	0.008	MG/KG	
	2-DIBROMO-3-CHLOROPROPAN	0.011	R	U	0.00025	0.011	MG/KG	SSCCV%
	— 1,2-DIBROMOETHANE	0.0034	R	U	0.00019	0.0034	MG/KG	SSCCV%
	1,2-DICHLOROBENZENE	0.0023	U	U	0.0001	0.0023	MG/KG	
	1,2-DICHLOROETHANE	0.0034	U	U	0.00033	0.0034	MG/KG	
	1,2-DICHLOROPROPANE	0.0023	U	U	0.00009	0.0023	MG/KG	
	1,3,5-TRIMETHYLBENZENE	0.0034	U	U	0.0001	0.0034	MG/KG	
	1,3-DICHLOROBENZENE	0.0068	U	U	0.00005	0.0068	MG/KG	
	1,3-DICHLOROPROPANE	0.0023	U	U	0.00015	0.0023	MG/KG	
	1,4-DICHLOROBENZENE	0.0023	U	U	0.00012	0.0023	MG/KG	
	1-CHLOROHEXANE	0.0034	R	U	0.00014	0.0034	MG/KG	CCVMISS
	2,2-DICHLOROPROPANE	0.023	U	U	0.00032	0.023	MG/KG	
	2-CHLOROTOLUENE	0.0023	U	U	0.0001	0.0023	MG/KG	
	4-BROMOFLUOROBENZENE	102			0.00341	0.00341	ERCEN	
	4-CHLOROTOLUENE	0.0034	U	U	0.00008	0.0034	MG/KG	
	BENZENE	0.0023	U	U	0.0001	0.0023	MG/KG	
	BROMOBENZENE	0.0023	U	U	0.00009	0.0023	MG/KG	
	BROMOCHLOROMETHANE	0.0023	U	U	0.00018	0.0023	MG/KG	
	BROMODICHLOROMETHANE	0.0045	U	U	0.0001	0.0045	MG/KG	
	BROMOFORM	0.0068	R	U	0.00018	0.0068	MG/KG	SSCCV%
	BROMOMETHANE	0.0057	R	U	0.0002	0.0057	MG/KG	SSCCV%
	CARBON TETRACHLORIDE	0.011	U	U	0.00016	0.011	MG/KG	
	CHLOROBENZENE	0.0023	U	U	0.00012	0.0023	MG/KG	
	CHLOROETHANE	0.0057	R	U	0.0003	0.0057	MG/KG	SSCCV%
	CHLOROFORM	0.0023	U	U	0.00015	0.0023	MG/KG	
	CHLOROMETHANE	0.008	R	U	0.00009	0.008	MG/KG	SSCCV%

12/16/65 21043

9711193 SW8260A

Page 7 of 9

CIS-1,2-DICHLOROETHENE	0.0068	U	U	0.00008	0.0068	MG/KG	
CIS-1,3-DICHLOROPROPENE	0.0057	U	U	0.00011	0.0057	MG/KG	
DIBROMOCHLOROMETHANE	0.0034	U	U	0.00016	0.0034	MG/KG	
DIBROMOFLUOROMETHANE	97			0.00341	0.00341	ERCEN	
DIBROMOMETHANE	0.011	U	U	0.0002	0.011	MG/KG	
DICHLORODIFLUOROMETHANE	0.0057	R	U	0.00036	0.0057	MG/KG	CCVMISS
ETHYLBENZENE	0.0034	U	U	0.00012	0.0034	MG/KG	
HEXA CHLOROBUTADIENE	0.0057	U	U	0.0002	0.0057	MG/KG	
ISOPROPYLBENZENE	0.0091	U	U	0.00013	0.0091	MG/KG	
M,P-XYLENE	0.008	U	U	0.00022	0.008	MG/KG	
METHYLENE CHLORIDE	0.0074	R	U	0.00021	0.0023	MG/KG	IC%RSE
METHYLENE CHLORIDE	0.0074	R	U	0.00021	0.0023	MG/KG	SSCCV%
N-BUTYLBENZENE	0.0057	U	U	0.00011	0.0057	MG/KG	
N-PROPYLBENZENE	0.0023	U	U	0.00009	0.0023	MG/KG	
NAPHTHALENE	0.0023	R	U	0.00012	0.0023	MG/KG	SSCCV%
O-XYLENE	0.0057	U	U	0.00013	0.0057	MG/KG	
P-ISOPROPYL TOLUENE	0.0068	U	U	0.00009	0.0068	MG/KG	
SEC-BUTYLBENZENE	0.008	U	U	0.00012	0.008	MG/KG	
STYRENE	0.0023	U	U	0.00012	0.0023	MG/KG	
TERT-BUTYLBENZENE	0.008	U	U	0.00013	0.008	MG/KG	
TETRA CHLOROETHENE	0.008	U	U	0.00017	0.008	MG/KG	
TOLUENE	0.0057	U	U	0.00014	0.0057	MG/KG	
TOLUENE-D8	108			0.00341	0.00341	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.0034	U	U	0.00009	0.0034	MG/KG	
TRANS-1,3-DICHLOROPROPENE	0.0057	U	U	0.00017	0.0057	MG/KG	
TRICHLOROETHENE	0.011	R	U	0.0001	0.011	MG/KG	SSCCV%
TRICHLOROFUOROMETHANE	0.0045	R	U	0.00022	0.0045	MG/KG	SSCCV%
VINYL CHLORIDE	0.01	R	U	0.00016	0.01	MG/KG	SSCCV%

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS-recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriate flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

Page 9 of 9

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

NAS FW JRB AOC 2

6521046



CH2MHILL

SDG 9711209

Method SW8260A

Reviewer nh

Date 2/26/98

Matrix water and soil

Senior Review Vito D'Aurora

Field Samples

1-Soil Sample

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
Soil					
AHA019	N	AHA020FD1	FD		
Water					
AHA017TB1	TB	AHA018EB1	EB	LABQC	BD

1. Case Narrative Items of Interest

- Both the water and soil-method blanks had Methylene Chloride detected > the reporting limit. This compound was detected in associated samples below the calculated value, so the data were flagged U.
- All water LCS/LCD recoveries and RPDs were within acceptance criteria with the exception of Methylene Chloride in the LCS/LCD and Naphthalene in the LCS. No hits for Naphthalene detected in the samples. All soil LCS/LCD recoveries and RPDs were within acceptance criteria.
- Water MS/MSDs could not be performed due to insufficient volume. All soil MS/MSD recoveries and RPDs were within acceptance criteria; however, belonged to the previous SDG.
- Several compounds from the ICV/CCV order curve were within the acceptance limit but exceeded the 15% RSD criteria. These were quantitated using the average response-factor due to software problem.

2. Blank Summary

Field Blanks All criteria were met.

Method Blanks Both the water and soil method blanks had Methylene Chloride detected > the reporting limit. Samples were all non-detects.

6521047

9711209 SW8260A

Page 2 of 8

<u>Blank Type</u>	<u>Blank ID</u>	<u>Analyte</u>	<u>Result</u>	<u>ReportLimit</u>	<u>LabFlag</u>	<u>Units</u>
LB	LABQC	METHYLENE CHLORIDE	0.55	0.21		UG/L
TB	AHA017TB1	CHLOROFORM	0.54	0.15		UG/L

3. Spikes and Duplicates

Field Duplicates The RPD > UCL for Methylene Chloride. The native and FD were flagged UJ due to the samples being flagged U (by the lab) from the method blank 10x criteria.

Laboratory Duplicates None

Matrix Spike MS/MSDs for soil were performed and included from a previous SDG 9711193. All criteria were met.

4. Laboratory Control Sample

1. All water LCS/LCD recoveries and RPDs were within acceptance criteria with the exception of Methylene Chloride in the LCS/LCD and Naphthalene in the LCS. No hits for Naphthalene detected in the samples. No flags applied to EB or TB.
2. All soil LCS/LCD recoveries and RPDs were within acceptance criteria.

<u>Matrix</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>Analyte</u>	<u>Recovery</u>	<u>LowerLimit</u>	<u>UpperLimit</u>
WATER BS	LABQC		METHYLENE CHLORIDE	51	75	-
WATER BS	LABQC		NAPHTHALENE	72	75	125
WATER BD	LABQC		METHYLENE CHLORIDE	54	75	125

5. Surrogates

All surrogate recoveries were within acceptance criteria.

6. Tuning and Mass Calibration

All criteria met.

7. Internal Standard

All internal standard recoveries were within acceptance criteria.

8. Calibration Information

Initial Calibration

1. Methylene Chloride from the 11/12/97 water ICAL exceeded the 15% RSD criteria. The TB or EB were not validated.
2. Methylene Chloride from the 11/24/97 soil ICAL exceeded criteria. The applicable samples were flagged R.

<u>Field ID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation Reason</u>
AHA019	METHYLENE CHLORIDE	R	IC%RSD
AHA020FD1	METHYLENE CHLORIDE	R	IC%RSD

Continuing Calibration

1. Several compounds from the 11/24/97 water CCV fell above the +/- 25% expected value. The TB or EB were not validated.
2. There was no soil CCV needed in the package since the ICAL was run immediately before the samples and the CCV run after. A second source was used as a verification.
3. 1-Chlorohexane and Dichlorodifluoromethane were not listed on the 2nd source CCV probably due to not being detected or co-elution. These analytes were flagged R on the soil sample.
4. Fourteen analytes exceeded %D criteria on the 2nd source CCV and were flagged R.

<u>Field ID</u>	<u>LabsampleID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation</u>
AHA019	9711209-3	1-CHLOROHEXANE	R	CCVMIS:
AHA019	9711209-3	DICHLORODIFLUOROMETHANE	R	CCVMIS:
AHA020FD1	9711209-4	1-CHLOROHEXANE	R	CCVMIS:
AHA020FD1	9711209-4	DICHLORODIFLUOROMETHANE	R	CCVMIS:

9. Holding Time

Holding times were met.

10. Summary

- General Comments**
1. Both the water and soil method blanks had Methylene Chloride detected > the reporting limit. This compound was detected in samples < the calculated value, so the data were flagged U and not validated.
 2. The RPD > UCL for Methylene Chloride. The native and FD were flagged UJ due to the samples being flagged U (by the lab) from the method blank 10x criteria.
 3. Methylene Chloride from the 11/24/97 soil ICAL exceeded criteria. The applicable samples were flagged R.
 4. 1-Chlorohexane and Dichlorodifluoromethane were not listed on the 2nd source CCV probably due to not being detected or co-elution. These analytes were flagged R on the soil sample.
 5. Fourteen analytes exceeded %D criteria on the 2nd source CCV and were flagged R.

Data Package Completeness Form 7 for the soil CCV is missing from the package. Requested of Lori on 2/26/98. This Form is not needed per Paragon. See explanation under the CCV. Second source is used as a verification.

Forms Review/ Items of Interest Nothing of interest.

COC Review Complete

6521049

9711209; SW8260A

Page 4 of 8

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA019	1,1,1,2-TETRACHLOROETHANE	0.0034	U	U	0.00015	0.0034	MG/KG	
	1,1,1-TRICHLOROETHANE	0.0045	U	U	0.00013	0.0045	MG/KG	
	1,1,2,2-TETRACHLOROETHANE	0.0023	R	U	0.00017	0.0023	MG/KG	SSCCV%
	1,1,2-TRICHLOROETHANE	0.0056	U	U	0.00016	0.0056	MG/KG	
	1,1-DICHLOROETHANE	0.0023	U	U	0.00011	0.0023	MG/KG	
	1,1-DICHLOROETHENE	0.0068	U	U	0.00015	0.0068	MG/KG	
	1,1-DICHLOROPROPENE	0.0056	U	U	0.00014	0.0056	MG/KG	
	1,2,3-TRICHLOROBENZENE	0.0023	R	U	0.00015	0.0023	MG/KG	SSCCV%
	1,2,3-TRICHLOROPROPANE	0.023	U	U	0.00015	0.023	MG/KG	
	1,2,4-TRICHLOROBENZENE	0.0023	R	U	0.00013	0.0023	MG/KG	SSCCV%
	1,2,4-TRIMETHYLBENZENE	0.0079	U	U	0.00009	0.0079	MG/KG	
	2-DIBROMO-3-CHLOROPROPAN	0.011	R	U	0.00025	0.011	MG/KG	SSCCV%
	1,2-DIBROMOETHANE	0.0034	R	U	0.00019	0.0034	MG/KG	SSCCV%
	1,2-DICHLOROBENZENE	0.0023	U	U	0.0001	0.0023	MG/KG	
	1,2-DICHLOROETHANE	0.0034	U	U	0.00033	0.0034	MG/KG	
	1,2-DICHLOROPROPANE	0.0023	U	U	0.00009	0.0023	MG/KG	
	1,3,5-TRIMETHYLBENZENE	0.0034	U	U	0.0001	0.0034	MG/KG	
	1,3-DICHLOROBENZENE	0.0068	U	U	0.00005	0.0068	MG/KG	
	1,3-DICHLOROPROPANE	0.0023	U	U	0.00015	0.0023	MG/KG	
	1,4-DICHLOROBENZENE	0.0023	U	U	0.00012	0.0023	MG/KG	
	1-CHLOROHEXANE	0.0034	R	U	0.00014	0.0034	MG/KG	CCVMISSI
	2,2-DICHLOROPROPANE	0.023	U	U	0.00032	0.023	MG/KG	
	2-CHLOROTOLUENE	0.0023	U	U	0.0001	0.0023	MG/KG	
4-BROMOFLUOROBENZENE	107				0.00338	0.00338	ERCEN	
	4-CHLOROTOLUENE	0.0034	U	U	0.00008	0.0034	MG/KG	
	BENZENE	0.0023	U	U	0.0001	0.0023	MG/KG	
	BROMOBENZENE	0.0023	U	U	0.00009	0.0023	MG/KG	
	BROMOCHLOROMETHANE	0.0023	U	U	0.00018	0.0023	MG/KG	
	BROMODICHLOROMETHANE	0.0045	U	U	0.0001	0.0045	MG/KG	
	BROMOFORM	0.0068	R	U	0.00018	0.0068	MG/KG	SSCCV%
	BROMOMETHANE	0.0056	R	U	0.0002	0.0056	MG/KG	SSCCV%
	CARBON TETRACHLORIDE	0.011	U	U	0.00016	0.011	MG/KG	
	CHLOROBENZENE	0.0023	U	U	0.00012	0.0023	MG/KG	
DICHLORODIFLUOROMETHANE	CHLOROETHANE	0.0056	R	U	0.0003	0.0056	MG/KG	SSCCV%
	CHLOROFORM	0.0023	U	U	0.00015	0.0023	MG/KG	
	CHLOROMETHANE	0.0079	R	U	0.00009	0.0079	MG/KG	SSCCV%
	CIS-1,2-DICHLOROETHENE	0.0068	U	U	0.00008	0.0068	MG/KG	
	CIS-1,3-DICHLOROPROPENE	0.0056	U	U	0.00011	0.0056	MG/KG	
	DIBROMOCHLOROMETHANE	0.0034	U	U	0.00016	0.0034	MG/KG	
	DIBROMOFLUOROMETHANE	101			0.00338	0.00338	ERCEN	
	DIBROMOMETHANE	0.011	U	U	0.0002	0.011	MG/KG	
	ETHYLBENZENE	0.0034	U	U	0.00012	0.0034	MG/KG	
	HEXAChLOROBUTADIENE	0.0056	U	U	0.0002	0.0056	MG/KG	
METHYLENE CHLORIDE	ISOPROPYLBENZENE	0.009	U	U	0.00013	0.009	MG/KG	
	M,P-XYLENE	0.0079	U	U	0.00022	0.0079	MG/KG	
	METHYLENE CHLORIDE	0.0074	R	U	0.00021	0.0023	MG/KG	IC%RSI

6521050

9711209 SW8260A

Page 5 of 8

METHYLENE CHLORIDE	0.0074	R	U	0.00021	0.0023	MG/KG	SSCCV%
N-BUTYLBENZENE	0.0056	U	U	0.00011	0.0056	MG/KG	
N-PROPYLBENZENE	0.0023	U	U	0.00009	0.0023	MG/KG	
NAPHTHALENE	0.0023	R	U	0.00012	0.0023	MG/KG	SSCCV%
O-XYLENE	0.0056	U	U	0.00013	0.0056	MG/KG	
P-ISOPROPYLTOLUENE	0.0068	U	U	0.00009	0.0068	MG/KG	
SEC-BUTYLBENZENE	0.0079	U	U	0.00012	0.0079	MG/KG	
STYRENE	0.0023	U	U	0.00012	0.0023	MG/KG	
TERT-BUTYLBENZENE	0.0079	U	U	0.00013	0.0079	MG/KG	
TETRACHLOROETHENE	0.0079	U	U	0.00017	0.0079	MG/KG	
TOLUENE	0.0056	U	U	0.00014	0.0056	MG/KG	
TOLUENE-D8	103			0.00338	0.00338	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.0034	U	U	0.00009	0.0034	MG/KG	
TRANS-1,3-DICHLOROPROPENE	0.0056	U	U	0.00017	0.0056	MG/KG	
TRICHLOROETHENE	0.011	R	U	0.0001	0.011	MG/KG	SSCCV%
TRICHLOROFLUOROMETHANE	0.0045	R	U	0.00022	0.0045	MG/KG	SSCCV%
VINYL CHLORIDE	0.01	R	U	0.00016	0.01	MG/KG	SSCCV%

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA020FDI	1,1,1,2-TETRACHLOROETHANE	0.0035	U	U	0.00015	0.0035	MG/KG	
	1,1,1-TRICHLOROETHANE	0.0046	U	U	0.00013	0.0046	MG/KG	
	1,1,2,2-TETRACHLOROETHANE	0.0023	R	U	0.00017	0.0023	MG/KG	SSCCV%
	1,1,2-TRICHLOROETHANE	0.0058	U	U	0.00016	0.0058	MG/KG	
	1,1-DICHLOROETHANE	0.0023	-	U	0.00011	0.0023	MG/KG	
	1,1-DICHLOROETHENE	0.007	U	U	0.00015	0.007	MG/KG	
	1,1-DICHLOROPROPENE	0.0058	U	U	0.00014	0.0058	MG/KG	
	1,2,3-TRICHLOROBENZENE	0.0023	R	U	0.00015	0.0023	MG/KG	SSCCV%
	1,2,3-TRICHLOROPROPANE	0.023	U	U	0.00015	0.023	MG/KG	
	1,2,4-TRICHLOROBENZENE	0.0023	R	U	0.00013	0.0023	MG/KG	SSCCV%
	1,2,4-TRIMETHYLBENZENE	0.0081	U	U	0.00009	0.0081	MG/KG	
	2-DIBROMO-3-CHLOROPROPANE	0.012	R	U	0.00025	0.012	MG/KG	SSCCV%
	1,2-DIBROMOETHANE	0.0035	R	U	0.00019	0.0035	MG/KG	SSCCV%
	1,2-DICHLOROBENZENE	0.0023	U	U	0.0001	0.0023	MG/KG	
	1,2-DICHLOROETHANE	0.0035	U	U	0.00033	0.0035	MG/KG	
	1,2-DICHLOROPROPANE	0.0023	U	U	0.00009	0.0023	MG/KG	
	1,3,5-TRIMETHYLBENZENE	0.0035	U	U	0.0001	0.0035	MG/KG	
	1,3-DICHLOROBENZENE	0.007	U	U	0.00005	0.007	MG/KG	
	1,3-DICHLOROPROPANE	0.0023	U	U	0.00015	0.0023	MG/KG	
	1,4-DICHLOROBENZENE	0.0023	U	U	0.00012	0.0023	MG/KG	
	1-CHLOROHEXANE	0.0035	R	U	0.00014	0.0035	MG/KG	CCVMISSI
	2,2-DICHLOROPROPANE	0.023	U	U	0.00032	0.023	MG/KG	
	2-CHLOROTOLUENE	0.0023	-	U	0.0001	0.0023	MG/KG	
	4-BROMOFLUOROBENZENE	107			0.00348	0.00348	ERCEN	
	4-CHLOROTOLUENE	0.0035	U	U	0.00008	0.0035	MG/KG	
	BENZENE	0.0023	U	U	0.0001	0.0023	MG/KG	
	BROMOBENZENE	0.0023	U	U	0.00009	0.0023	MG/KG	
	BROMOCHLOROMETHANE	0.0023	U	U	0.00018	0.0023	MG/KG	
	BROMODICHLOROMETHANE	0.0046	U	U	0.0001	0.0046	MG/KG	
	BROMOFORM	0.007	R	U	0.00018	0.007	MG/KG	SSCCV%
	BROMOMETHANE	0.0058	R	U	0.0002	0.0058	MG/KG	SSCCV%
	CARBON TETRACHLORIDE	0.012	U	U	0.00016	0.012	MG/KG	
	CHLOROBENZENE	0.0023	U	U	0.00012	0.0023	MG/KG	
	CHLOROETHANE	0.0058	R	U	0.0003	0.0058	MG/KG	SSCCV%
	CHLOROFORM	0.0023	U	U	0.00015	0.0023	MG/KG	
	CHLOROMETHANE	0.0081	R	U	0.00009	0.0081	MG/KG	SSCCV%

6521051

9711209 SW8260A

Page 6 of 8

CIS-1,2-DICHLOROETHENE	0.007	U	U	0.00008	0.007	MG/KG	
CIS-1,3-DICHLOROPROPENE	0.0058	U	U	0.00011	0.0058	MG/KG	
DIBROMOCHLOROMETHANE	0.0035	U	U	0.00016	0.0035	MG/KG	
DIBROMOFLUOROMETHANE	104			0.00348	0.00348	ERCEN	
DIBROMOMETHANE	0.012	U	U	0.0002	0.012	MG/KG	
DICHLORODIFLUOROMETHANE	0.0058	R	U	0.00036	0.0058	MG/KG	CCVMISSI
ETHYLBENZENE	0.0035	U	U	0.00012	0.0035	MG/KG	
HEXACHLOROBUTADIENE	0.0058	U	U	0.0002	0.0058	MG/KG	
ISOPROPYLBENZENE	0.0093	U	U	0.00013	0.0093	MG/KG	
M,P-XYLENE	0.0081	U	U	0.00022	0.0081	MG/KG	
METHYLENE CHLORIDE	0.0044	R	U	0.00021	0.0023	MG/KG	IC%RSI
METHYLENE CHLORIDE	0.0044	R	U	0.00021	0.0023	MG/KG	SSCCV%
N-BUTYLBENZENE	0.0058	U	U	0.00011	0.0058	MG/KG	
N-PROPYLBENZENE	0.0023	U	U	0.00009	0.0023	MG/KG	
NAPHTHALENE	0.0023	R	U	0.00012	0.0023	MG/KG	SSCCV%
O-XYLENE	0.0058	U	U	0.00013	0.0058	MG/KG	
P-ISOPROPYLTOLUENE	0.007	U	U	0.00009	0.007	MG/KG	
SEC-BUTYLBENZENE	0.0081	U	U	0.00012	0.0081	MG/KG	
STYRENE	0.0023	U	U	0.00012	0.0023	MG/KG	
TERT-BUTYLBENZENE	0.0081	U	U	0.00013	0.0081	MG/KG	
TETRACHLOROETHENE	0.0081	U	U	0.00017	0.0081	MG/KG	
TOLUENE	0.0058	U	U	0.00014	0.0058	MG/KG	
TOLUENE-D8	103			0.00348	0.00348	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.0035	U	U	0.00009	0.0035	MG/KG	
TRANS-1,3-DICHLOROPROPENE	0.0058	U	U	0.00017	0.0058	MG/KG	
TRICHLOROETHENE	0.012	R	U	0.0001	0.012	MG/KG	SSCCV%
TRICHLOROFLUOROMETHANE	0.0046	R	U	0.00022	0.0046	MG/KG	SSCCV%
VINYL CHLORIDE	0.01	R	U	0.00016	0.01	MG/KG	SSCCV%

Validation Flag Abbreviations

Abbreviation	Validation Reason
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
-tCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrx	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

6521053

9711209 SW8260A

Page 8 of 8

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

NAS FW JRB AOC 2**Data Quality Evaluation****CH2MHILL****SDG 9711222****Method SW8260A****Reviewer nh****Date 2/27/98****Matrix water and soil**

Senior Review Vito D'Aurora

Field Samples**2- Soil Samples**

Field ID	QAQC Type	Field ID	QAQC Type	Field ID	QAQC Type
Soil					
AHA024	N	AHA025	N		
Water					
AHA021TB1	TB	AHA022AB1	AB	AHA023EB1	EB
LABQC	BD				

**1. Case Narrative
Items of Interest**

1. Both the water and soil method blanks had Methylene Chloride detected > the reporting limit. This compound was detected in associated samples below the calculated value, so the data were flagged U.
2. All water LCS/LCD recoveries and RPDs were within acceptance criteria with the exception of Methylene Chloride in the LCS/LCD and Naphthalene in the LCS. No hits for Naphthalene detected in the samples. All soil LCS/LCD recoveries and RPDs were within acceptance criteria.
3. Soil MS/MSD were performed and included in a previous SDG 9711193.
4. Sample 5 was analyzed at a higher dilution due to the concentration of target and non-target analytes.
5. Several compounds from the ICV/CCV order curve were within the acceptance limit but exceeded the 15% RSD criteria. These were quantitated using the average response factor due to software problem.

2. Blank Summary

Field Blanks Methylene Chloride was detected in the Trip blank. Associated samples were non-detects and no flagging necessary.

Method Blanks Both the water and soil method blanks had Methylene Chloride detected > the reporting limit. Samples were all non-detects.

6521055
9711222 SW8260A

Page 2 of 8

<u>Blank Type</u>	<u>Blank ID</u>	<u>Analyte</u>	<u>Result</u>	<u>ReportLimit</u>	<u>LabFlag</u>	<u>Units</u>
TB	AHA021TB1	CHLOROFORM	0.57	0.15		UG/L

3. Spikes and Duplicates

Field Duplicates None

Laboratory Duplicates None

Matrix Spike MS/MSDs for soil were performed and included from a previous SDG 9711193. All criteria were met.

4. Laboratory Control Sample

1. All water LCS/LCD recoveries were within acceptance criteria with the exception of Methylene Chloride in the LCS/LCD and Naphthalene in the LCS. The RPD for 1,2-Dibromo-3-Chloropropane was > UCL. No flags applied to field blanks.
2. All soil LCS/LCD recoveries and RPDs were within acceptance criteria.

<u>Matrix</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>Analyte</u>	<u>Recovery</u>	<u>LowerLimit</u>	<u>UpperLimit</u>
WATER	BS	LABQC	METHYLENE CHLORIDE	51	75	125
WATER	BS	LABQC	NAPHTHALENE	72	—	125
WATER	BD	LABQC	METHYLENE CHLORIDE	54	75	125

5. Surrogates

All surrogate recoveries were within acceptance criteria.

6. Tuning and Mass Calibration

All criteria met.

7. Internal Standard

All internal standard recoveries were within acceptance criteria.

8. Calibration Information

- Initial Calibration**
1. Methylene Chloride from the 11/12/97 water ICAL exceeded the 15% RSD criteria. The field blanks were not validated.
 2. Methylene Chloride from the 11/24/97 soil ICAL exceeded criteria. The applicable samples were flagged R.

<u>Field ID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation Reason</u>
AHA024	METHYLENE CHLORIDE	R	IC%RSD
AHA025	METHYLENE CHLORIDE	R	IC%RSD

Continuing Calibration

1. Several compounds from the 11/24/97 water CCV fell above the +/- 2S% expected value. The field blanks were not validated.
2. There was no soil CCV needed in the package since the ICAL was run immediately before the samples and the CCV run after. A second source was used as a verification.
3. 1-Chlorohexane and Dichlorodifluoromethane were not listed on the 2nd source CCV probably due to not being detected or co-elution. These analytes were flagged R on the soil sample.
4. Fourteen analytes exceeded %D criteria on the 2nd source CCV and were flagged R.

<u>Field ID</u>	<u>LabsampleID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation</u>
AHA024	9711222-4	1-CHLOROHEXANE	R	CCVMIS:
AHA024	9711222-4	DICHLORODIFLUOROMETHANE	R	CCVMIS:
AHA025	9711222-5	1-CHLOROHEXANE	R	CCVMIS:
AHA025	9711222-5	DICHLORODIFLUOROMETHANE	R	CCVMIS:

9. Holding Time

Holding times were met.

10. Summary

General Comments

1. Both the water and soil method blanks had Methylene Chloride detected > the reporting limit. This compound was detected in associated samples below the calculated value, so the data were flagged U and not validated.
2. Methylene Chloride was detected in the Trip blank. Associated samples were non-detects and no flagging necessary.
3. Methylene Chloride from the 11/24/97 soil ICAL exceeded criteria. The applicable samples were flagged R.
4. 1-Chlorohexane and Dichlorodifluoromethane were not listed on the 2nd source CCV probably due to not being detected or co-elution. These analytes were flagged R on the soil sample.
5. Fourteen analytes exceeded %D criteria on the 2nd source CCV and were flagged R.

Data Package Completeness

Form 7 for the soil CCV is missing from the package. This Form is not needed per Paragon. See explanation under the CCV. Second source is used as a verification.

Forms Review/ Items of Interest

Nothing of interest.

COC Review

Complete

6521057

9711222 SW8260A

Page 4 of 8

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA024	1,1,1,2-TETRACHLOROETHANE	3.5	U	U	3.5	3.5	UG/KG	
	1,1,1-TRICHLOROETHANE	4.7	U	U	4.7	4.7	UG/KG	
	1,1,2,2-TETRACHLOROETHANE	2.4	R	U	2.4	2.4	UG/KG	SSCCV%
	1,1,2-TRICHLOROETHANE	5.9	U	U	5.9	5.9	UG/KG	
	1,1-DICHLOROETHANE	2.4	U	U	2.4	2.4	UG/KG	
	1,1-DICHLOROETHENE	7.1	U	U	7.1	7.1	UG/KG	
	1,1-DICHLOROPROPENE	5.9	U	U	5.9	5.9	UG/KG	
	1,2,3-TRICHLOROBENZENE	2.4	R	U	2.4	2.4	UG/KG	SSCCV%
	1,2,3-TRICHLOROPROPANE	24	U	U	24	24	UG/KG	
	1,2,4-TRICHLOROBENZENE	2.4	R	U	2.4	2.4	UG/KG	SSCCV%
	1,2,4-TRIMETHYLBENZENE	8.3	U	U	8.3	8.3	UG/KG	
	2-DIBROMO-3-CHLOROPROPANE	12	R	U	12	12	UG/KG	SSCCV%
	1,2-DIBROMOETHANE	3.5	R	U	3.5	3.5	UG/KG	SSCCV%
	1,2-DICHLOROBENZENE	2.4	U	U	2.4	2.4	UG/KG	
	1,2-DICHLOROETHANE	3.5	U	U	3.5	3.5	UG/KG	
	1,2-DICHLOROPROPANE	2.4	U	U	2.4	2.4	UG/KG	
	1,3,5-TRIMETHYLBENZENE	3.5	U	U	3.5	3.5	UG/KG	
	1,3-DICHLOROBENZENE	7.1	U	U	7.1	7.1	UG/KG	
	1,3-DICHLOROPROPANE	2.4	U	U	2.4	2.4	UG/KG	
	1,4-DICHLOROBENZENE	2.4	U	U	2.4	2.4	UG/KG	
	-1-CHLOROHEXANE	3.5	R	U	3.5	3.5	UG/KG	CCVMISI
DIA001	2,2-DICHLOROPROPANE	24	U	U	24	24	UG/KG	
	2-CHLOROTOLUENE	2.4	U	U	2.4	2.4	UG/KG	
	4-BROMOFLUOROBENZENE	113			3.54	3.54	ERCEN	
	4-CHLOROTOLUENE	3.5	U	U	3.5	3.5	UG/KG	
	BENZENE	2.4	U	U	2.4	2.4	UG/KG	
	BROMOBENZENE	2.4	U	U	2.4	2.4	UG/KG	
	BROMOCHLOROMETHANE	2.4	U	U	2.4	2.4	UG/KG	
	BROMODICHLOROMETHANE	4.7	U	U	4.7	4.7	UG/KG	
	BROMOFORM	7.1	R	U	7.1	7.1	UG/KG	SSCCV%
	BROMOMETHANE	5.9	R	U	5.9	5.9	UG/KG	SSCCV%
DIA002	CARBON TETRACHLORIDE	12	U	U	12	12	UG/KG	
	CHLOROBENZENE	2.4	U	U	2.4	2.4	UG/KG	
	CHLOROETHANE	5.9	R	U	5.9	5.9	UG/KG	SSCCV%
	CHLOROFORM	2.4	U	U	2.4	2.4	UG/KG	
	CHLOROMETHANE	8.3	R	U	8.3	8.3	UG/KG	SSCCV%
	CIS-1,2-DICHLOROETHENE	7.1	U	U	7.1	7.1	UG/KG	
	CIS-1,3-DICHLOROPROPENE	5.9	U	U	5.9	5.9	UG/KG	
	DIBROMOCHLOROMETHANE	3.5	U	U	3.5	3.5	UG/KG	
	DIBROMOFLUOROMETHANE	103			3.54	3.54	ERCEN	
	DIBROMOMETHANE	12	U	U	12	12	UG/KG	
DIA003	DICHLORODIFLUOROMETHANE	5.9	R	U	5.9	5.9	UG/KG	CCVMISI
	ETHYLBENZENE	3.5	U	U	3.5	3.5	UG/KG	
	HEXACHLOROBUTADIENE	5.9	U	U	5.9	5.9	UG/KG	
	ISOPROPYLBENZENE	9.4	U	U	9.4	9.4	UG/KG	
	M,P-XYLENE	8.3	U	U	8.3	8.3	UG/KG	
	METHYLENE CHLORIDE	7.1	R	U	2.4	2.4	UG/KG	IC%RSI

6521058

9711222 SW8260A

Page 5 of 8

METHYLENE CHLORIDE	7.1	R	U	2.4	2.4	UG/KG	SSCCV%
N-BUTYLBENZENE	5.9	U	U	5.9	5.9	UG/KG	
N-PROPYLBENZENE	2.4	U	U	2.4	2.4	UG/KG	
NAPHTHALENE	2.4	R	U	2.4	2.4	UG/KG	SSCCV%
O-XYLENE	5.9	U	U	5.9	5.9	UG/KG	
P-ISOPROPYL TOLUENE	7.1	U	U	7.1	7.1	UG/KG	
SEC-BUTYLBENZENE	8.3	U	U	8.3	8.3	UG/KG	
STYRENE	2.4	U	U	2.4	2.4	UG/KG	
TERT-BUTYLBENZENE	8.3	U	U	8.3	8.3	UG/KG	
TETRACHLOROETHENE	8.3	U	U	8.3	8.3	UG/KG	
TOLUENE	5.9	U	U	5.9	5.9	UG/KG	
TOLUENE-D8	102			3.54	3.54	ERCEN	
TRANS-1,2-DICHLOROETHENE	3.5	U	U	3.5	3.5	UG/KG	
TRANS-1,3-DICHLOROPROPENE	5.9	U	U	5.9	5.9	UG/KG	
TRICHLOROETHENE	12	R	U	12	12	UG/KG	SSCCV%
TRICHLOROFLUOROMETHANE	4.7	R	U	4.7	4.7	UG/KG	SSCCV%
VINYL CHLORIDE	11	R	U	11	11	UG/KG	SSCCV%

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA025	1,1,1,2-TETRACHLOROETHANE	18	U	U	18	18	UG/KG	
	1,1,1-TRICHLOROETHANE	24	U	U	24	24	UG/KG	
	1,1,2,2-TETRACHLOROETHANE	12	R	U	12	12	UG/KG	SSCCV%
	1,1,2-TRICHLOROETHANE	30	U	U	30	30	UG/KG	
	1,1-DICHLOROETHANE	12	U	U	12	12	UG/KG	
	1,1-DICHLOROETHENE	35	U	U	35	35	UG/KG	
	1,1-DICHLOROPROPENE	30	U	U	30	30	UG/KG	
	1,2,3-TRICHLOROBENZENE	12	R	U	12	12	UG/KG	SSCCV%
	1,2,3-TRICHLOROPROPANE	120	U	U	120	120	UG/KG	
	1,2,4-TRICHLOROBENZENE	12	R	U	12	12	UG/KG	SSCCV%
	1,2,4-TRIMETHYLBENZENE	150	R	U	41	41	UG/KG	
	2-DIBROMO-3-CHLOROPROPAN	59	R	U	59	59	UG/KG	SSCCV%
	1,2-DIBROMOETHANE	18	R	U	18	18	UG/KG	SSCCV%
	1,2-DICHLOROBENZENE	12	U	U	12	12	UG/KG	
	1,2-DICHLOROETHANE	18	U	U	18	18	UG/KG	
	1,2-DICHLOROPROPANE	12	U	U	12	12	UG/KG	
	1,3,5-TRIMETHYLBENZENE	50			18	18	UG/KG	
	1,3-DICHLOROBENZENE	35	U	U	35	35	UG/KG	
	1,3-DICHLOROPROPANE	12	U	U	12	12	UG/KG	
	1,4-DICHLOROBENZENE	12	U	U	12	12	UG/KG	
	1-CHLOROHEXANE	18	R	U	18	18	UG/KG	CCVMISS
	2,2-DICHLOROPROPANE	120	U	U	120	120	UG/KG	
	2-CHLOROTOLUENE	12	U	U	12	12	UG/KG	
	4-BROMOFLUOROBENZENE	100			17.7	17.7	ERCEN	
	4-CHLOROTOLUENE	18	U	U	18	18	UG/KG	
	BENZENE	12	U	U	12	12	UG/KG	
	BROMOBENZENE	12	U	U	12	12	UG/KG	
	BROMOCHLOROMETHANE	12	U	U	12	12	UG/KG	
	BROMODICHLOROMETHANE	24	U	U	24	24	UG/KG	
	BROMOFORM	35	R	U	35	35	UG/KG	SSCCV%
	BROMOMETHANE	30	R	U	30	30	UG/KG	SSCCV%
	CARBON TETRACHLORIDE	59	U	U	59	59	UG/KG	
	CHLOROBENZENE	12	U	U	12	12	UG/KG	
	CHLOROETHANE	30	R	U	30	30	UG/KG	SSCCV%
	CHLOROFORM	12	U	U	12	12	UG/KG	
	CHLOROMETHANE	41	R	U	41	41	UG/KG	SSCCV%

6521059

9711222 SW8260A

Page 6 of 8

CIS-1,2-DICHLOROETHENE	35	U	U	35	35	UG/KG	
CIS-1,3-DICHLOROPROPENE	30	U	U	30	30	UG/KG	
DIBROMOCHLOROMETHANE	18	U	U	18	18	UG/KG	
DIBROMOFLUOROMETHANE	107			17.7	17.7	ERCEN	
DIBROMOMETHANE	59	U	U	59	59	UG/KG	
DICHLORODIFLUOROMETHANE	30	R	U	30	30	UG/KG	CCVMISSI
ETHYLBENZENE	32			18	18	UG/KG	
HEXACHLOROBUTADIENE	30	U	U	30	30	UG/KG	
ISOPROPYLBENZENE	47	U	U	47	47	UG/KG	
M,P-XYLENE	120			41	41	UG/KG	
METHYLENE CHLORIDE	19	R	U	12	12	UG/KG	IC%RSI
METHYLENE CHLORIDE	19	R	U	12	12	UG/KG	SSCCV%
N-BUTYLBENZENE	15	F	F	30	30	UG/KG	
N-PROPYLBENZENE	19			12	12	UG/KG	
NAPHTHALENE	110	R		12	12	UG/KG	SSCCV%
O-XYLENE	30	U	U	30	30	UG/KG	
P-ISOPROPYL TOLUENE	35	U	U	35	35	UG/KG	
SEC-BUTYLBENZENE	12	F	F	41	41	UG/KG	
STYRENE	12	U	U	12	12	UG/KG	
TERT-BUTYLBENZENE	14	F	F	41	41	UG/KG	
TETRACHLOROETHENE	41	U	U	41	41	UG/KG	
TOLUENE	30	U	U	30	30	UG/KG	
TOLUENE-D8	95			177	177	ERCEN	
TRANS-1,2-DICHLOROETHENE	18	U	U	18	18	UG/KG	
TRANS-1,3-DICHLOROPROPENE	30	U	U	30	30	UG/KG	
TRICHLOROETHENE	59	R	U	59	59	UG/KG	SSCCV%
TRICHLOROFUOROMETHANE	24	R	U	24	24	UG/KG	SSCCV%
VINYL CHLORIDE	53	R	U	53	53	UG/KG	SSCCV%

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

6521061

9711222 SW8260A

Page 8 of 8

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Tnp blank
TB<RL	Tnp blank concentration less than RL
TB>RL	Tnp blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in nsk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

6521062

NAS FW JRB AOC 2**Data Quality Evaluation****CH2MHILL****SDG 9711222** **Method SW826DA****Reviewer nh** **Date 2/27/98** **Matrix water and soil**

Senior Review Vito D'Aurora

Field Samples **2- Soil Samples**

Field ID	QAQC Type	Field ID	QAQC Type	Field ID	QAQC Type
Soil					
AHA024	N	AHA025	N		
Water					
AHA021TB1	TB	AHA022AB1	AB	AHA023EB1	EB
LABQC	BD				

1. Case Narrative**Items of Interest**

- Both the water and soil method blanks had Methylene Chloride detected > the reporting limit. This compound was detected in associated samples below the calculated value, so the data were flagged U.
- All water LCS/LCD recoveries and RPDs were within acceptance criteria with the exception of Methylene Chloride in the LCS/LCD and Naphthalene in the LCS. No hits for Naphthalene detected in the samples. All soil LCS/LCD recoveries and RPDs were within acceptance criteria.
- Soil MS/MSD were performed and included in a previous SDG 9711193.
- Sample 5 was analyzed at a higher dilution due to the concentration of target and non-target analytes.
- Several compounds from the ICV/CCV order curve were within the acceptance limit but exceeded the 15% RSD criteria. These were quantitated using the average response factor due to software problem.

2. Blank Summary

Field Blanks Methylene Chloride was detected in the Trip blank. Associated samples were non-detects and no flagging necessary.

Method Blanks Both the water and soil method blanks had Methylene Chloride detected > the reporting limit. Samples were all non-detects.

6521063

9711222 SW8260A

Page 2 of 8

<u>Blank Type</u>	<u>Blank ID</u>	<u>Analyte</u>	<u>Result</u>	<u>ReportLimit</u>	<u>LabFlag</u>	<u>Units</u>
TB	AHA021TB1	CHLOROFORM	0.57	0.15		UG/L

3. Spikes and Duplicates

Field Duplicates None

Laboratory Duplicates None

Matrix Spike MS/MSDs for soil were performed and included from a previous SDG 9711193. All criteria were met.

4. Laboratory Control Sample

1. All water LCS/LCD recoveries were within acceptance criteria with the exception of Methylene Chloride in the LCS/LCD and Naphthalene in the LCS. The RPD for 1,2-Dibromo-3-Chloropropane was > UCL. No flags applied to field blanks.
2. All soil LCS/LCD recoveries and RPDs were within acceptance criteria.

<u>Matrix</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>Analyte</u>	<u>Recovery</u>	<u>LowerLimit</u>	<u>UpperLimit</u>
WATER	BS	LABQC	METHYLENE CHLORIDE	51	75	125
—	WATER	BS	NAPHTHALENE	72	75	125
—	WATER	BD	METHYLENE CHLORIDE	54	75	125

5. Surrogates

All surrogate recoveries were within acceptance criteria.

6. Tuning and Mass Calibration

All criteria met.

7. Internal Standard

All internal standard recoveries were within acceptance criteria.

8. Calibration Information

Initial Calibration

1. Methylene Chloride from the 11/12/97 water ICAL exceeded the 15% RSD criteria. The field blanks were not validated.
2. Methylene Chloride from the 11/24/97 soil ICAL exceeded criteria. The applicable samples were flagged R.

6521064

<u>Field ID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation Reason</u>
AHA024	METHYLENE CHLORIDE	R	1C%RSO
AHA025	METHYLENE CHLORIDE	R	1C%RSO

Continuing Calibration

1. Several compounds from the 11/24/97 water CCV fell above the +/- 25% expected value. The field blanks were not validated.
2. There was no soil CCV needed in the package since the ICAL was run immediately before the samples and the CCV run after. A second source was used as a verification.
3. 1-Chlorohexane and Dichlorodifluoromethane were not listed on the 2nd source CCV probably due to not being detected or co-elution. These analytes were flagged R on the soil sample.
4. Fourteen analytes exceeded %D criteria on the 2nd source CCV and were flagged R.

<u>Field ID</u>	<u>LabsampleID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation</u>
AHA024	9711222-4	1-CHLOROHEXANE	R	CCVMIS:
AHA024	9711222-4	DICHLORODIFLUOROMETHANI	R	CCVMIS:
AHA025	9711222-5	1-CHLOROHEXANE	R	CCVMIS:
AHA025	9711222-5	DICHLORODIFLUOROMETHANI	R	CCVMIS:

9. Holding Time

Holding times were met.

10. Summary**General Comments**

1. Both the water and soil method blanks had Methylene Chloride detected > the reporting limit. This compound was detected in associated samples below the calculated value, so the data were flagged U and not validated.
2. Methylene Chloride was detected in the Trip blank. Associated samples were non-detects and no flagging necessary.
3. Methylene Chloride from the 11/24/97 soil ICAL exceeded criteria. The applicable samples were flagged R.
4. 1-Chlorohexane and Dichlorodifluoromethane were not listed on the 2nd source CCV probably due to not being detected or co-elution. These analytes were flagged R on the soil sample.
5. Fourteen analytes exceeded %D criteria on the 2nd source CCV and were flagged R.

Data Package Completeness Form 7 for the soil CCV is missing from the package. This Form is not needed per Paragon. See explanation under the CCV. Second source is used as a verification.

Forms Review/ Items of Interest Nothing of interest.

COC Review Complete

6521065

9711222 SW8260A

Page 4 of 8

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA024	1,1,1,2-TETRACHLOROETHANE	3.5	U	U	3.5	3.5	UG/KG	
	1,1,1-TRICHLOROETHANE	4.7	U	U	4.7	4.7	UG/KG	
	1,1,2-TETRACHLOROETHANE	2.4	R	U	2.4	2.4	UG/KG	SSCCV%
	1,1,2-TRICHLOROETHANE	5.9	U	U	5.9	5.9	UG/KG	-
	1,1-DICHLOROETHANE	2.4	U	U	2.4	2.4	UG/KG	
	1,1-DICHLOROETHENE	7.1	U	U	7.1	7.1	UG/KG	
	1,1-DICHLOROPROPENE	5.9	U	U	5.9	5.9	UG/KG	
	1,2,3-TRICHLOROBENZENE	2.4	R	U	2.4	2.4	UG/KG	SSCCV%
	1,2,3-TRICHLOROPROPANE	24	U	U	24	24	UG/KG	
	1,2,4-TRICHLOROBENZENE	2.4	R	U	2.4	2.4	UG/KG	SSCCV%
	1,2,4-TRIMETHYLBENZENE	8.3	U	U	8.3	8.3	UG/KG	
	2-DIBROMO-3-CHLOROPROPANE	12	R	U	12	12	UG/KG	-SSCCV%
	1,2-DIBROMOETHANE	3.5	R	U	3.5	3.5	UG/KG	SSCCV%
	1,2-DICHLOROBENZENE	2.4	U	U	2.4	2.4	UG/KG	
	1,2-DICHLOROETHANE	3.5	U	U	3.5	3.5	UG/KG	
	1,2-DICHLOROPROPANE	2.4	U	U	2.4	2.4	UG/KG	
	1,3,5-TRIMETHYLBENZENE	3.5	U	U	3.5	3.5	UG/KG	
	1,3-DICHLOROBENZENE	7.1	U	U	7.1	7.1	UG/KG	
	1,3-DICHLOROPROPANE	2.4	U	U	2.4	2.4	UG/KG	
	1,4-DICHLOROBENZENE	2.4	U	U	2.4	2.4	UG/KG	
	1-CHLOROHEXANE	3.5	R	U	3.5	3.5	UG/KG	CCVMISSTI
	2,2-DICHLOROPROPANE	24	U	U	24	24	UG/KG	
	2-CHLOROTOLUENE	2.4	U	U	2.4	2.4	UG/KG	
	4-BROMOFLUOROBENZENE	113			3.54	3.54	ERCEN	
	4-CHLOROTOLUENE	3.5	U	U	3.5	3.5	UG/KG	
	BENZENE	2.4	U	U	2.4	2.4	UG/KG	
	BROMOBENZENE	2.4	U	U	2.4	2.4	UG/KG	
	BROMOCHLOROMETHANE	2.4	U	U	2.4	2.4	UG/KG	
	BROMODICHLOROMETHANE	4.7	U	U	4.7	4.7	UG/KG	
	BROMOFORM	7.1	R	U	7.1	7.1	UG/KG	SSCCV%
	BROMOMETHANE	5.9	R	U	5.9	5.9	UG/KG	SSCCV%
	CARBON TETRACHLORIDE	12	U	U	12	12	UG/KG	
	CHLOROBENZENE	2.4	U	U	2.4	2.4	UG/KG	
	CHLOROETHANE	5.9	R	U	5.9	5.9	UG/KG	SSCCV%
	CHLOROFORM	2.4	U	U	2.4	2.4	UG/KG	
	CHLOROMETHANE	8.3	R	U	8.3	8.3	UG/KG	SSCCV%
	CIS-1,2-DICHLOROETHENE	7.1	U	U	7.1	7.1	UG/KG	
	CIS-1,3-DICHLOROPROPENE	5.9	U	U	5.9	5.9	UG/KG	
	DIBROMOCHLOROMETHANE	3.5	U	U	3.5	3.5	UG/KG	
	DIBROMOFLUOROMETHANE	103			3.54	3.54	ERCEN	
	DIBROMOMETHANE	12	U	U	12	12	UG/KG	
	DICHLORODIFLUOROMETHANE	5.9	R	U	5.9	5.9	UG/KG	CCVMISSTI
	ETHYLBENZENE	3.5	U	U	3.5	3.5	UG/KG	
	HEXAChLOROBUTADIENE	5.9	U	U	5.9	5.9	UG/KG	
	ISOPROPYLBENZENE	9.4	U	U	9.4	9.4	UG/KG	
	M,P-XYLENE	8.3	U	U	8.3	8.3	UG/KG	
	METHYLENE CHLORIDE	7.1	R	U	2.4	2.4	UG/KG	IC%RSC

S 01151 d

6521066

METHYLENE CHLORIDE	7.1	R	U	2.4	2.4	UG/KG	SSCCV%
N-BUTYLBENZENE	5.9	U	U	5.9	5.9	UG/KG	
N-PROPYLBENZENE	2.4	U	U	2.4	2.4	UG/KG	
NAPHTHALENE	2.4	R	U	2.4	2.4	UG/KG	SSCCV%
O-XYLENE	5.9	U	U	5.9	5.9	UG/KG	
P-ISOPROPYLTOLUENE	7.1	U	U	7.1	7.1	UG/KG	
SEC-BUTYLBENZENE	8.3	U	U	8.3	8.3	UG/KG	
STYRENE	2.4	U	U	2.4	2.4	UG/KG	
TERT-BUTYLBENZENE	8.3	U	U	8.3	8.3	UG/KG	
TETRACHLOROETHENE	8.3	U	U	8.3	8.3	UG/KG	
TOLUENE	5.9	U	U	5.9	5.9	UG/KG	
TOLUENE-D8	102			3.54	3.54	ERCEN	
TRANS-1,2-DICHLOROETHENE	3.5	U	U	3.5	3.5	UG/KG	
TRANS-1,3-DICHLOROPROPENE	5.9	U	U	5.9	5.9	UG/KG	
TRICHLOROETHENE	12	R	U	12	12	UG/KG	SSCCV%
TRICHLOROFLUOROMETHANE	4.7	R	U	4.7	4.7	UG/KG	SSCCV%
VINYL CHLORIDE	11	R	U	11	11	UG/KG	SSCCV%

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA025	1,1,1,2-TETRACHLOROETHANE	18	U	U	18	18	UG/KG	
	1,1,1-TRICHLOROETHANE	24	U	U	24	24	UG/KG	
	1,1,2,2-TETRACHLOROETHANE	12	R	U	12	12	UG/KG	SSCCV%
	1,1,2-TRICHLOROETHANE	30	U	U	30	30	UG/KG	
	1,1-DICHLOROETHANE	12	U	U	12	12	UG/KG	
	1,1-DICHLOROETHENE	35	U	U	35	35	UG/KG	
	1,1-DICHLOROPROPENE	30	U	U	30	30	UG/KG	
	1,2,3-TRICHLOROBENZENE	12	R	U	12	12	UG/KG	SSCCV%
	1,2,3-TRICHLOROPROPANE	120	U	U	120	120	UG/KG	
	1,2,4-TRICHLOROBENZENE	12	R	U	12	12	UG/KG	SSCCV%
	1,2,4-TRIMETHYLBENZENE	150			41	41	UG/KG	
	2-DIBROMO-3-CHLOROPROPAN	59	R	U	59	59	UG/KG	SSCCV%
	1,2-DIBROMOETHANE	18	R	U	18	18	UG/KG	SSCCV%
	1,2-DICHLOROBENZENE	12	U	U	12	12	UG/KG	
	1,2-DICHLOROETHANE	18	U	U	18	18	UG/KG	
	1,2-DICHLOROPROPANE	12	U	U	12	12	UG/KG	
	1,3,5-TRIMETHYLBENZENE	50			18	18	UG/KG	
	1,3-DICHLOROBENZENE	35	U	U	35	35	UG/KG	
	1,3-DICHLOROPROPANE	12	U	U	12	12	UG/KG	
	1,4-DICHLOROBENZENE	12	U	U	12	12	UG/KG	
	1-CHLOROHEXANE	18	R	U	18	18	UG/KG	CCVMISS
	2,2-DICHLOROPROPANE	120	U	U	120	120	UG/KG	
	2-CHLOROTOLUENE	12	U	U	12	12	UG/KG	
	4-BROMOFLUOROBENZENE	100			17.7	17.7	ERCEN	
	4-CHLOROTOLUENE	18	U	U	18	18	UG/KG	
	BENZENE	12	U	U	12	12	UG/KG	
	BROMOBENZENE	12	U	U	12	12	UG/KG	
	BROMOCHLOROMETHANE	12	U	U	12	12	UG/KG	
	BROMODICHLOROMETHANE	24	U	U	24	24	UG/KG	
	BROMOFORM	35	R	U	35	35	UG/KG	SSCCV%
	BROMOMETHANE	30	R	U	30	30	UG/KG	SSCCV%
	CARBON TETRACHLORIDE	59	U	U	59	59	UG/KG	
	CHLOROBENZENE	12	U	U	12	12	UG/KG	
	CHLOROETHANE	30	R	U	30	30	UG/KG	SSCCV%
	CHLOROFORM	12	U	U	12	12	UG/KG	
	CHLOROMETHANE	41	R	U	41	41	UG/KG	SSCCV%

6521067

9711222 SW8260A

Page 6 of 8

CIS-1,2-DICHLOROETHENE	35	U	U	35	35	UG/KG	
CIS-1,3-DICHLOROPROPENE	30	U	U	30	30	UG/KG	
DIBROMOCHLOROMETHANE	18	U	U	18	18	UG/KG	
DIBROMOFLUOROMETHANE	107			17.7	17.7	ERCEN	
DIBROMOMETHANE	59	U	U	59	59	UG/KG	
DICHLORODIFLUOROMETHANE	30	R	U	30	30	UG/KG	CCVMISSI
ETHYLBENZENE	32			18	18	UG/KG	
HEXACHLOROBUTADIENE	30	U	U	30	30	UG/KG	
ISOPROPYLBENZENE	47	U	U	47	47	UG/KG	
M,P-XYLENE	120			41	41	UG/KG	
METHYLENE CHLORIDE	19	R	U	12	12	UG/KG	IC%RSI
METHYLENE CHLORIDE	19	R	U	12	12	UG/KG	SSCCV%
N-BUTYLBENZENE	15	F	F	30	30	UG/KG	
N-PROPYLBENZENE	19			12	12	UG/KG	
NAPHTHALENE	110	R		12	12	UG/KG	SSCCV%
O-XYLENE	30	U	U	30	30	UG/KG	
P-ISOPROPYLTOLUENE	35	U	U	35	35	UG/KG	
SEC-BUTYLBENZENE	12	F	F	41	41	UG/KG	
STYRENE	12	U	U	12	12	UG/KG	
TERT-BUTYLBENZENE	14	F	F	41	41	UG/KG	
TETRACHLOROETHENE	41	U	U	41	41	UG/KG	
TOLUENE	30	U	U	30	30	UG/KG	
TOLUENE-D8	95			17.7	17.7	ERCEN	
TRANS-1,2-DICHLOROETHENE	18	U	U	18	18	UG/KG	
TRANS-1,3-DICHLOROPROPENE	30	U	U	30	30	UG/KG	
TRICHLOROETHENE	59	R	U	59	59	UG/KG	SSCCV%
TRICHLOROFLUOROMETHANE	24	R	U	24	24	UG/KG	SSCCV%
VINYL CHLORIDE	53	R	U	53	53	UG/KG	SSCCV%

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not requested
FD>RPD	Field duplicate-exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrx	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

6521069
9711222 SW8260A

Page 8 of 8

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

6521070

CH2MHILL

NAS FW JRB AOC 2

Data Quality Evaluation

SDG 9711254 Method SW9060

Reviewer nh Date 3/4/98 Matrix water

Senior Review Vito D'Aurora

Field Samples None

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
-----------------	------------------	-----------------	------------------	-----------------	------------------

Water

AHA032EB1	EB
-----------	----

1. Case Narrative Items of Interest

1. All blanks were reported < the RL.
2. An MS/MSD were extracted and analyzed with this batch on a sample from another client.

2. Blank Summary

Field Blanks Total Organic Carbon was detected in the equipment blank and used to validate the soil sample from SDG 9802049.

Method Blanks All blanks were reported < the RL.

<u>Blank Type</u>	<u>Blank ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Report Limit</u>	<u>Lab Flag</u>	<u>Units</u>
EB	AHA032EB1	TOTAL ORGANIC CARBON	3	0.085		MG/L

3. Spikes and Duplicates

Field Duplicates None

6521071
9711254 SW9060

Page 2 of 6

Laboratory Duplicates RPD criteria met.

Matrix Spike An MS/MSD were extracted and analyzed with this batch on a sample from another client. Not validated.

4. Laboratory Control Sample None

5. Surrogates Not applicable.

6. Tuning and Mass Calibration Not applicable.

7. Internal Standard Not applicable.

8.-Calibration Information

Initial Calibration All criteria were met.

Continuing Calibration All criteria were met.

9. Holding Time Holding times were met.

10. Summary

General Comments No flagging necessary.

Data Package Completeness

1. The soil TOC analysis will come in another SDG from RECRA Labnet incorporated into a Paragon package. One soil analysis from SDG 9802049 will be validated with this water EB.
2. The package included an MS/MSD from another client.

3. No LCS was provided.

Forms Review/ Items of Interest

No items to note.

COC Review

The soil TOC analysis will come in another SDG from RECRA Labnet incorporated into a Paragon package. One soil analysis (AHA033) from SDG 9802049 will be validated with this water EB.

6521073

9711254 SW9060

Page 4 of 6

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriate flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

6521075

9711254 SW9060

Page 6 of 6

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Tnp blank
TB<RL	Tnp blank concentration less than RL
TB>RL	Tnp blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D critena
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within critena

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

NAS FW JRB AOC 2

6521076


CH2MHILL

SDG 9711254

Method SW8260A

Reviewer nh

Date 3/4/98

Matrix water and soil

Senior Review Vito D'Aurora

Field Samples

1-Soil Sample

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
Soil					
AHA033	N				
Water					
AHA031TB1	TB	AHA032EB1	EB	LABQC	BD

1. Case Narrative Items of Interest

- Both the water and soil method blanks had Methylene Chloride detected > the reporting limit. This compound was detected in associated samples below the calculated value, so the data were flagged U.
- All water LCS/LCD recoveries and RPDs were within acceptance criteria with the exception of Methylene Chloride in the LCS/LCD and Naphthalene in the LCS. No hits for Naphthalene detected in the samples. All soil LCS/LCD recoveries and RPDs were within acceptance criteria.
- Soil MS/MSD Were performed and included in a previous SDG 9711193.
- Several compounds from the ICV/CCV order curve were within the acceptance limit but exceeded the 15% RSD criteria. These were quantitated using the average response factor due to software problem.

2. Blank Summary

Field Blanks Chloroform was detected in the Trip blank. Associated samples were non-detects and no flagging necessary.

Method Blanks Both the water and soil method blanks had Methylene Chloride detected > the reporting limit. Samples were all non-detects.

<u>Blank Type</u>	<u>Blank ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Report Limit</u>	<u>LabFlag</u>	<u>Units</u>
-------------------	-----------------	----------------	---------------	---------------------	----------------	--------------

6521077

9711254 SW8260A

Page 2 of 7

LB	LABQC	METHYLENE CHLORI	0.55	0.21	UG/L
TB	AHA031TB1	CHLOROFORM	0.47	0.15	UG/L

3. Spikes and Duplicates

Field Duplicates None

Laboratory Duplicates None

Matrix Spike MS/MSDs for soil were performed and included from a previous SDG 9711193. All criteria were met.

4. Laboratory Control Sample

1. All water LCS/LCD recoveries were within acceptance criteria with the exception of Methylene Chloride in the LCS/LCD and Naphthalene in the LCS. The RPD for 1,2-Dibromo-3-Chloropropane was > UCL. No flags applied to field blanks.
2. All soil LCS/LCD recoveries and RPDs were within acceptance criteria.

Matrix	QAQC Type	Field ID	Analyte	Recovery	Lower Limit	Upper Limit
WATER	BS	LABQC	METHYLENE CHLORIDE	51	75	125
WATER	BS	LABQC	NAPHTHALENE	72	75	125
WATER	BD	LABQC	METHYLENE CHLORIDE	54	75	125

5. Surrogates

All surrogate recoveries were within acceptance criteria.

6. Tuning and Mass Calibration

All criteria met.

7. Internal Standard

All internal standard recoveries were within acceptance criteria.

8. Calibration Information

Initial Calibration

1. Methylene Chloride from the 11/12/97 water ICAL order curve exceeded the % RSD criteria. The field blanks were not validated.
2. Methylene Chloride from the 11/24/97 soil ICAL order curve exceeded criteria. The applicable samples were flagged R.

Field ID	Analyte	Validation Flag	Validation Reason
AHA031	METHYLENE CHLORIDE	0	None

ANALYSIS

METHYLENE CHLORIDE

ICV%RSD

Continuing Calibration

1. Several compounds from the 11/24/97 water CCV order curve fell above the +/-25% expected value. The field blanks were not validated.
2. There was no soil CCV needed in the package since the ICAL was run immediately before the samples and the CCV run after. A second source was used as a verification.
3. 1-Chlorohexane and Dichlorodifluoromethane were not listed on the 2nd source CCV probably due to not being detected or co-elution. These analytes were flagged R on the soil sample.
4. Fourteen analytes exceeded %D criteria on the 2nd source CCV and were flagged R.

<u>Field ID</u>	<u>LabsampleID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation</u>
AHA033	9711254-3	1-CHLOROHEXANE	R	CCVMIS:
AHA033	9711254-3	DICHLORODIFLUOROMETHANE	R	CCVMIS:

9. Holding Time

Holding times were met.

10. Summary

- General Comments**
1. Both the water and soil method blanks had Methylene Chloride detected > the reporting limit. This compound was detected in associated samples below the calculated value, so the data were flagged U and not validated.
 2. Methylene Chloride was detected in the Trip blank. Associated samples were non-detects and no flagging necessary.
 3. Methylene Chloride from the 11/24/97 soil ICV order curve exceeded criteria. The applicable samples were flagged R.
 4. 1-Chlorohexane and Dichlorodifluoromethane were not listed on the 2nd source CCV probably due to not being detected or co-elution. These analytes were flagged R on the soil sample.
 5. Fourteen analytes exceeded %D criteria on the 2nd source CCV and were flagged R.

Data Package Completeness Form-7 for the soil CCV is missing from the package. This Form is not needed per Paragon. See explanation under the CCV. Second source is used as a verification. Missing pages received 3/5/98.

Forms Review/ Items of Interest Nothing of interest.

COC Review Complete

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA033	1,1,1,2-TETRACHLOROETHANE	0.017	U	U	0.00075	0.017	MG/KG	
	1,1,1-TRICHLOROETHANE	0.023	U	U	0.00065	0.023	MG/KG	
	1,1,2,2-TETRACHLOROETHANE	0.011	R	U	0.00085	0.011	MG/KG	SSCCV%
	1,1,2-TRICHLOROETHANE	0.029	U	U	0.0008	0.029	MG/KG	
	1,1-DICHLOROETHANE	0.011	U	U	0.00055	0.011	MG/KG	
	- 1,1-DICHLOROETHENE	0.034	U	U	0.00075	0.034	MG/KG	
	1,1-DICHLOROPROPENE	0.029	U	U	0.0007	0.029	MG/KG	
	1,2,3-TRICHLOROBENZENE	0.011	R	U	0.00075	0.011	MG/KG	SSCCV%
	1,2,3-TRICHLOROPROPANE	0.11	U	U	0.00075	0.11	MG/KG	
	1,2,4-TRICHLOROBENZENE	0.011	R	U	0.00065	0.011	MG/KG	SSCCV%
	1,2,4-TRIMETHYLBENZENE	0.04	U	U	0.00045	0.04	MG/KG	
	2-DIBROMO-3-CHLOROPROPANE	0.057	R	U	0.00125	0.057	MG/KG	SSCCV%
	1,2-DIBROMOETHANE	0.017	R	U	0.00095	0.017	MG/KG	SSCCV%
	1,2-DICHLOROBENZENE	0.011	U	U	0.0005	0.011	MG/KG	
	1,2-DICHLOROETHANE	0.017	U	U	0.00165	0.017	MG/KG	
	1,2-DICHLOROPROPANE	0.011	U	U	0.00045	0.011	MG/KG	
	1,3,5-TRIMETHYLBENZENE	0.017	U	- U	0.0005	0.017	MG/KG	
	1,3-DICHLOROBENZENE	0.034	U	U	0.00025	0.034	MG/KG	
	1,3-DICHLOROPROPANE	0.011	U	U	0.00075	0.011	MG/KG	
	1,4-DICHLOROBENZENE	0.011	U	U	0.0006	0.011	MG/KG	
	2,2-DICHLOROPROPANE	0.11	U	U	0.0016	0.11	MG/KG	
	2-CHLOROTOLUENE	0.011	U	U	0.0005	0.011	MG/KG	
	4-BROMOFLUOROBENZENE	103			0.0172	0.0172	ERCEN	
	4-CHLOROTOLUENE	0.017	U	U	0.0004	0.017	MG/KG	
	BENZENE	0.011	U	U	0.0005	0.011	MG/KG	
	BROMOBENZENE	0.011	U	U	0.00045	0.011	MG/KG	
	BROMOCHLOROMETHANE	0.011	U	U	0.0009	0.011	MG/KG	
	BROMODICHLOROMETHANE	0.023	U	U	0.0005	0.023	MG/KG	
	BROMOFORM	0.034	R	U	0.0009	0.034	MG/KG	SSCCV%
	BROMOMETHANE	0.029	R	U	0.001	0.029	MG/KG	SSCCV%
	CARBON TETRACHLORIDE	0.057	U	U	0.0008	0.057	MG/KG	
	CHLOROBENZENE	0.011	U	U	0.0006	0.011	MG/KG	
	CHLOROETHANE	0.029	R	U	0.0015	0.029	MG/KG	SSCCV%
	CHLOROFORM	0.011	U	U	0.00075	0.011	MG/KG	
	CHLOROMETHANE	0.04	R	U	0.00045	0.04	MG/KG	SSCCV%
	CIS-1,2-DICHLOROETHENE	0.034	U	U	0.0004	0.034	MG/KG	
	CIS-1,3-DICHLOROPROPENE	0.029	U	U	0.00055	0.029	MG/KG	
	DIBROMOCHLOROMETHANE	0.017	U	U	0.0008	0.017	MG/KG	
	DIBROMOFLUOROMETHANE	97			0.0172	0.0172	ERCEN	
	DIBROMOMETHANE	0.057	U	U	0.001	0.057	MG/KG	
	ETHYLBENZENE	0.017	U	U	0.0006	0.017	MG/KG	
	HEXACHLOROBUTADIENE	0.029	U	U	0.001	0.029	MG/KG	
	ISOPROPYLBENZENE	0.046	U	U	0.00065	0.046	MG/KG	
	M,P-XYLENE	0.04	U	U	0.0011	0.04	MG/KG	
	METHYLENE CHLORIDE	0.017	R	U	0.00105	0.011	MG/KG	IC%RSI
	METHYLENE CHLORIDE	0.017	R	U	0.00105	0.011	MG/KG	SSCCV%
	N-BUTYLBENZENE	0.029	U	U	0.00055	0.029	MG/KG	

N-PROPYLBENZENE	0.011	U	U	0.00045	0.011	MG/KG	
NAPHTHALENE	0.011	R	U	0.0006	0.011	MG/KG	SSCCV%
O-XYLENE	0.029	U	U	0.00065	0.029	MG/KG	
P-ISOPROPYLTOLUENE	0.034	U	U	0.00045	0.034	MG/KG	
SEC-BUTYLBENZENE	0.04	U	U	0.0006	0.04	MG/KG	
STYRENE	0.011	U	U	0.0006	0.011	MG/KG	
TERT-BUTYLBENZENE	0.04	U	U	0.00065	0.04	MG/KG	
TETRACHLOROETHENE	0.04	U	U	0.00085	0.04	MG/KG	
TOLUENE	0.029	U	U	0.0007	0.029	MG/KG	
TOLUENE-D8	104			0.0172	0.0172	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.017	U	U	0.00045	0.017	MG/KG	
TRANS-1,3-DICHLOROPROPENE	0.029	U	U	0.00085	0.029	MG/KG	
TRICHLOROETHENE	0.057	R	U	0.0005	0.057	MG/KG	SSCCV%
TRICHLOROFLUOROMETHANE	0.023	R	U	0.0011	0.023	MG/KG	SSCCV%
VINYL CHLORIDE	0.052	R	U	0.0008	0.052	MG/KG	SSCCV%

6521081

9711254 SW8260A

Page 6 of 7

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range.
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not requested
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

6521083

NAS FW JRB AOC 2

Data Quality Evaluation



CH2MHILL

SDG 9711262 Method SW9060

Reviewer nh Date 4/16/98 Matrix water

Senior Review Vito D'Aurora

Field Samples None

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
-----------------	------------------	-----------------	------------------	-----------------	------------------

Water

AHA027EB1 EB

1. Case Narrative

-Items of Interest

1. All blanks were reported < the RL.
2. An MS/MSD were extracted and analyzed with this batch on a sample from another client.

2. Blank Summary

Field Blanks Total Organic Carbon was not detected in the equipment blank.

Method Blanks All blanks were reported < the RL.

3. Spikes and Duplicates

Field Duplicates None

Laboratory Duplicates RPD criteria met.

6521084
9711262 SW9060

Page 2 of 6

Matrix Spike An MS/MSD were extracted and analyzed with this batch on a sample from another client. Not validated.

4. Laboratory Control Sample None

5. Surrogates Not applicable.

6. Tuning and Mass Calibration Not applicable.

7. Internal Standard Not applicable.

8. Calibration Information

Initial Calibration All criteria were met.

Continuing Calibration All criteria were met.

9. Holding Time Holding times were met.

10. Summary

General Comments No flagging necessary.

Data Package Completeness

1. The soil TOC analysis will come in another SDG from RECRA Labnet incorporated into a Paragon package. Three soil analyses (AHA028, 029 and 030) from SDG 9802049 will be validated with this water EB.
2. The package included an MS/MSD from another client.

6521085

9711262 SW9060

Page 3 of 6

**Forms Review/ Items of
Interest**

No items to note.

COC Review

The soil TOC analysis will come in another SDG from RECRA Labnet incorporated into a Paragon package. Three soil analyses (AHA028, 029 and 030) from SDG 9802049 will be validated with this water EB.

6521086

9711262 SW9060

Page 4 of 6

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent-difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriate flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%D	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

6521088

9711262 SW9060

Page 6 of 6

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in nsk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

**Data Quality Evaluation****CH2MHILL****SDG 9711262** **Method SW8260A****Reviewer nh** **Date 3/5/98** **Matrix water and soil**

Senior Review Vito D'Aurora

Field Samples **3-Soil Samples**

Field ID	QAQC Type	Field ID	QAQC Type	Field ID	QAQC Type
Soil					
AHA028	N	AHA028MS1	MS	AHA028SD1	SD
AHA029	N	AHA030	N	LABQC	BD
Water					
AHA026TB1	TB	AHA027EB1	EB		

**1. Case Narrative
Items of Interest**

1. The water method blank had Methylene Chloride detected > the reporting limit. This compound was detected in associated samples below the calculated value, so the data were flagged U (by the lab).
2. No targets detected in the soil blank.
3. All water LCS/LCD recoveries and RPDs were within acceptance criteria with the exception of Methylene Chloride in the LCS/LCD and Naphthalene in the LCS. No hits for Naphthalene detected in the samples.
4. All soil LCS/LCD recoveries and RPDs were within acceptance criteria with the exception of Methylene Chloride in the LCS/LCD and Naphthalene in the LCD. No hits for Naphthalene detected in the samples.
5. Water MS/MSDs were not performed due to insufficient volume.
6. All soil MS/MSDs were within criteria with the exception of Methylene Chloride in both spikes and DBCP in the RPD. The recoveries for DBCP were within criteria for both spikes and there were no hits detected.
7. Several compounds from the ICV/CCV order curve were within the acceptance limit but exceeded the 15% RSD criteria. These were quantitated using the average response factor due to software problem.

2. Blank Summary**Field Blanks** Chloroform was detected in the Trip blank; however, all results were non-detects. No flagging applied.

6521090

9711262 SW8260A

Page 2 of 10

- Method Blanks**
1. The water method blank had Methylene Chloride detected > the reporting limit. This compound was detected in associated samples below the calculated value, so the data were flagged U (by the lab). No validation necessary.
 2. No targets detected in the soil blank.

<u>Blank Type</u>	<u>Blank ID</u>	<u>Analyte</u>	<u>Result</u>	<u>ReportLimit</u>	<u>LabFlag</u>	<u>Units</u>
LB	LABQC	METHYLENE CHLORIDE	0.55	0.21		UG/L
TB	AHA026TB1	CHLOROFORM	0.53	0.15		UG/L

3. Spikes and Duplicates

Field Duplicates None

Laboratory Duplicates None

- Matrix Spike**
1. Water MS/MSDs were not performed due to insufficient volume.
 2. All soil MS/MSDs were within criteria with the exception of Methylene Chloride in both spikes and DBCP and 1,1,2,2-Tetrachloroethane in the RPD. The recoveries for these two compounds were within criteria for both spikes and there were no hits detected; therefore, no flags applied. J flagged positive results for Methylene Chloride.

MS RPD

<u>Analyte</u>	<u>Spike</u>	<u>Result</u>	<u>Dupe</u>	<u>Result</u>	<u>RPD</u>	<u>Criteria</u>	<u>Matrix</u>
1,1,2,2-TETRACHL MS		91	SD	67	30.38	30	SOIL
1,2-DIBROMO-3-C MS		95	SD	58	48.37	30	SOIL

4. Laboratory Control Sample

1. All water LCS/LCD recoveries and RPDs were within acceptance criteria with the exception of Methylene Chloride in the LCS/LCD and Naphthalene in the LCS. No hits for Naphthalene detected in the samples. The RPD for 1,2-Dibromo-3-Chloropropane was > UCL. Field blanks not flagged.
2. All soil LCS/LCD recoveries and RPDs were within acceptance criteria with the exception of Methylene Chloride in the LCS/LCD and Naphthalene in the LCD. The Naphthalene RPD was also > criteria. No hits for Naphthalene detected in the samples and no flagging needed. All positive results were flagged J for Methylene Chloride.

<u>Matrix</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>Analyte</u>	<u>Recovery</u>	<u>LowerLimit</u>	<u>UpperLimit</u>
SOIL	BS	LABQC	METHYLENE CHLORIDE	31	65	135
SOIL	BD	LABQC	METHYLENE CHLORIDE	30	65	135
SOIL	BD	LABQC	NAPHTHALENE	142	65	135

5. Surrogates

All surrogate recoveries were within acceptance criteria.

6. Tuning and Mass Calibration All criteria met.

7. Internal Standard All internal standard recoveries were within acceptance criteria.

8. Calibration Information

Initial Calibration

1. Methylene Chloride from the 11/12/97 water ICAL order curve exceeded the % RSD criteria. The field blanks were not validated.
2. Methylene Chloride from the 11/24/97 soil ICAL order curve exceeded criteria. The applicable samples were flagged R.

<u>Field ID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation Reason</u>
AHA028	METHYLENE CHLORIDE	R	IC%RSD
AHA029	METHYLENE CHLORIDE	R	IC%RSD
AHA030	METHYLENE CHLORIDE	R	IC%RSD

Continuing Calibration

1. Several compounds from the 11/24/97 water CCV order curve fell above the +/-25% expected value. The field blanks were not validated.
2. 1-Chlorohexane and Dichlorodifluoromethane were not listed on the 2nd source CCV probably due to not being detected or co-elution. These analytes were flagged R on the soil sample.
3. Fourteen analytes exceeded %D criteria on the 2nd source CCV and were flagged R.
4. Methylene Chloride exceeded expected value in the 11/25/97 soil CCV. The sample was flagged R.

<u>Field ID</u>	<u>LabsampleID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation</u>
AHA028	9711262-3	1-CHLOROHEXANE	R	CCVMIS:
AHA028	9711262-3	DICHLORODIFLUOROMETHANE	R	CCVMIS:
AHA028	9711262-3	METHYLENE CHLORIDE	R	CV%D
AHA029	9711262-4	1-CHLOROHEXANE	R	CCVMIS:
AHA029	9711262-4	DICHLORODIFLUOROMETHANE	R	CCVMIS:
AHA029	9711262-4	METHYLENE CHLORIDE	R	CV%D
AHA030	9711262-5	1-CHLOROHEXANE	R	CCVMIS:
AHA030	9711262-5	DICHLORODIFLUOROMETHANE	R	CCVMIS:
AHA030	9711262-5	METHYLENE CHLORIDE	R	CV%D

9. Holding Time Holding times were met.

6521092

9711262 SW8260A

Page 4 of 10

10. Summary

General Comments

1. All soil LCS/LCD recoveries and RPDs were within acceptance criteria with the exception of Methylene Chloride in the LCS/LCD and Naphthalene in the LCD. The Naphthalene RPD was also > criteria. No hits for Naphthalene detected in the samples and no flagging needed. All positive results were flagged J for Methylene Chloride.
2. All soil MS/MSDs were within criteria with the exception of Methylene Chloride in both spikes and DBCP and 1,1,2,2-Tetrachloroethane in the RPD. The recoveries for these two compounds were within criteria for both spikes and there were no hits detected; therefore, no flags applied. J flagged positive results for Methylene Chloride.
3. Methylene Chloride from the 11/24/97 soil ICV order curve exceeded criteria. The applicable samples were flagged R.
4. 1-Chlorohexane and Dichlorodifluoromethane were not listed on the 2nd source CCV probably due to not being detected or co-elution. These analytes were flagged R on the soil sample.
5. Fourteen analytes exceeded %D criteria on the 2nd source CCV and were flagged R.
6. Methylene Chloride exceeded expected value in the 11/25/97 soil CCV. The sample was flagged R.

Data Package Completeness Waiting for missing pages from Paragon (2nd page soil CCV). Called Lori on 3/5/98 to have the pages faxed. Called on 3/6/98, still haven't received.
Received faxed pages on 3/9/98 approx. 3:00.

Forms Review/ Items of Interest Nothing of interest.

COC Review Complete

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA028	1,1,1,2-TETRACHLOROETHANE	0.0039	U	U	0.00015	0.0039	MG/KG	
	1,1,1-TRICHLOROETHANE	0.0052	U	U	0.00013	0.0052	MG/KG	
	1,1,2,2-TETRACHLOROETHANE	0.0026	R	U	0.00017	0.0026	MG/KG	SSCCV%
	1,1,2-TRICHLOROETHANE	0.0065	U	U	0.00016	0.0065	MG/KG	
	1,1-DICHLOROETHANE	0.0026	U	U	0.00011	0.0026	MG/KG	
	1,1-DICHLOROETHENE	0.0078	U	U	0.00015	0.0078	MG/KG	
	1,1-DICHLOROPROPENE	0.0065	U	U	0.00014	0.0065	MG/KG	
	1,2,3-TRICHLOROBENZENE	0.0026	R	U	0.00015	0.0026	MG/KG	SSCCV%
	1,2,3-TRICHLOROPROPANE	0.026	U	U	0.00015	0.026	MG/KG	
	1,2,4-TRICHLOROBENZENE	0.0026	R	U	0.00013	0.0026	MG/KG	SSCCV%
	1,2,4-TRIMETHYLBENZENE	0.0091	U	U	0.00009	0.0091	MG/KG	
	2-DIBROMO-3-CHLOROPROPANE	0.013	R	U	0.00025	0.013	MG/KG	SSCCV%
	1,2-DIBROMOETHANE	0.0039	R	U	0.00019	0.0039	MG/KG	SSCCV%
	1,2-DICHLOROBENZENE	0.0026	U	U	0.0001	0.0026	MG/KG	
	1,2-DICHLOROETHANE	0.0039	U	U	0.00033	0.0039	MG/KG	
	1,2-DICHLOROPROPANE	0.0026	U	U	0.00009	0.0026	MG/KG	
	1,3,5-TRIMETHYLBENZENE	0.0039	U	U	0.0001	0.0039	MG/KG	
	1,3-DICHLOROBENZENE	0.0078	U	U	0.00005	0.0078	MG/KG	
	1,3-DICHLOROPROPANE	0.0026	U	U	0.00015	0.0026	MG/KG	
	1,4-DICHLOROBENZENE	0.0026	U	U	0.00012	0.0026	MG/KG	
	2,2-DICHLOROPROPANE	0.026	U	U	0.00032	0.026	MG/KG	
	2-CHLOROTOLUENE	0.0026	U	U	0.0001	0.0026	MG/KG	
	4-BROMOFLUOROBENZENE	106			0.00388	0.00388	ERCEN	
	4-CHLOROTOLUENE	0.0039	U	U	0.00008	0.0039	MG/KG	
	BENZENE	0.0026	U	U	0.0001	0.0026	MG/KG	
	BROMOBENZENE	0.0026	U	U	0.00009	0.0026	MG/KG	
	BROMOCHLOROMETHANE	0.0026	U	U	0.00018	0.0026	MG/KG	
	BROMODICHLOROMETHANE	0.0052	U	U	0.0001	0.0052	MG/KG	
	BROMOFORM	0.0078	R	U	0.00018	0.0078	MG/KG	SSCCV%
	BROMOMETHANE	0.0065	R	U	0.0002	0.0065	MG/KG	SSCCV%
	CARBON TETRACHLORIDE	0.013	U	U	0.00016	0.013	MG/KG	
	CHLOROBENZENE	0.0026	U	U	0.00012	0.0026	MG/KG	
	CHLOROETHANE	0.0065	R	U	0.0003	0.0065	MG/KG	SSCCV%
	CHLORFORM	0.0026	U	U	0.00015	0.0026	MG/KG	
	CHLOROMETHANE	0.0091	R	U	0.00009	0.0091	MG/KG	SSCCV%
	CIS-1,2-DICHLOROETHENE	0.0078	U	U	0.00008	0.0078	MG/KG	
	CIS-1,3-DICHLOROPROPENE	0.0065	U	U	0.00011	0.0065	MG/KG	
	DIBROMOCHLOROMETHANE	0.0039	U	U	0.00016	0.0039	MG/KG	
	DIBROMOFLUOROMETHANE	96			0.00388	0.00388	ERCEN	
	DIBROMOMETHANE	0.013	U	U	0.0002	0.013	MG/KG	
	DICHLORODIFLUOROMETHANE	0.0065	R	U	0.00036	0.0065	MG/KG	CCVMISS
	ETHYLBENZENE	0.0039	U	U	0.00012	0.0039	MG/KG	
	HEXACHLOROBUTADIENE	0.0065	U	U	0.0002	0.0065	MG/KG	
	ISOPROPYLBENZENE	0.01	U	U	0.00013	0.01	MG/KG	
	M,P-XYLENE	0.0091	U	U	0.00022	0.0091	MG/KG	
	METHYLENE CHLORIDE	0.0027	R		0.00021	0.0026	MG/KG	CV%D
	METHYLENE CHLORIDE	0.0027	R		0.00021	0.0026	MG/KG	IC%RSI

6521094

9711262 SW8260A

Page 6 of 10

METHYLENE CHLORIDE	0.0027	R		0.00021	0.0026	MG/KG	SSCCV%
N-BUTYLBENZENE	0.0065	U	U	0.00011	0.0065	MG/KG	
N-PROPYLBENZENE	0.0026	U	U	0.00009	0.0026	MG/KG	
NAPHTHALENE	0.0026	R	U	0.00012	0.0026	MG/KG	SSCCV%
O-XYLENE	0.0065	U	U	0.00013	0.0065	MG/KG	
P-ISOPROPYLtolUENE	0.0078	U	U	0.00009	0.0078	MG/KG	
SEC-BUTYLBENZENE	0.0091	U	U	0.00012	0.0091	MG/KG	
STYRENE	0.0026	U	U	0.00012	0.0026	MG/KG	
TERT-BUTYLBENZENE	0.0091	U	U	0.00013	0.0091	MG/KG	
TETRACHLOROETHENE	0.0091	U	U	0.00017	0.0091	MG/KG	
TOLUENE	0.0065	U	U	0.00014	0.0065	MG/KG	
TOLUENE-D8	97			0.00388	0.00388	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.0039	U	U	0.00009	0.0039	MG/KG	
TRANS-1,3-DICHLOROPROPENE	0.0065	U	U	0.00017	0.0065	MG/KG	
TRICHLOROETHENE	0.013	R	U	0.0001	0.013	MG/KG	SSCCV%
TRICHLOROFUOROMETHANE	0.0052	R	U	0.00022	0.0052	MG/KG	SSCCV%
VINYL CHLORIDE	0.012	R	U	0.00016	0.012	MG/KG	SSCCV%

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA029	1,1,1,2-TETRACHLOROETHANE	0.0034	U	U	0.00015	0.0034	MG/KG	
	1,1,1-TRICHLOROETHANE	0.0046	U	U	0.00013	0.0046	MG/KG	
	1,1,2,2-TETRACHLOROETHANE	0.0023	R	U	0.00017	0.0023	MG/KG	SSCCV%
	1,1,2-TRICHLOROETHANE	0.0057	U	U	0.00016	0.0057	MG/KG	
	1,1-DICHLOROETHANE	0.0023	U	U	0.00011	0.0023	MG/KG	
	1,1-DICHLOROETHENE	0.0069	U	U	0.00015	0.0069	MG/KG	
	1,1-DICHLOROPROPENE	0.0057	U	U	0.00014	0.0057	MG/KG	
	1,2,3-TRICHLOROBENZENE	0.0023	R	U	0.00015	0.0023	MG/KG	SSCCV%
	1,2,3-TRICHLOROPROPANE	0.023	U	U	0.00015	0.023	MG/KG	
	1,2,4-TRICHLOROBENZENE	0.0023	R	U	0.00013	0.0023	MG/KG	SSCCV%
	1,2,4-TRIMETHYLBENZENE	0.008	U	U	0.00009	0.008	MG/KG	
	2-DIBROMO-3-CHLOROPROPANE	0.011	R	U	0.00025	0.011	MG/KG	SSCCV%
	1,2-DIBROMOETHANE	0.0034	R	U	0.00019	0.0034	MG/KG	SSCCV%
	1,2-DICHLOROBENZENE	0.0023	U	U	0.0001	0.0023	MG/KG	
	1,2-DICHLOROETHANE	0.0034	U	U	0.00033	0.0034	MG/KG	
	1,2-DICHLOROPROPANE	0.0023	U	U	0.00009	0.0023	MG/KG	
	1,3,5-TRIMETHYLBENZENE	0.0034	U	U	0.0001	0.0034	MG/KG	
	1,3-DICHLOROBENZENE	0.0069	U	U	0.00005	0.0069	MG/KG	
	1,3-DICHLOROPROPANE	0.0023	U	U	0.00015	0.0023	MG/KG	
	1,4-DICHLOROBENZENE	0.0023	U	U	0.00012	0.0023	MG/KG	
	2,2-DICHLOROPROPANE	0.023	U	U	0.00032	0.023	MG/KG	
	2-CHLOROTOLUENE	0.0023	U	U	0.0001	0.0023	MG/KG	
	4-BROMOFLUOROBENZENE	104			0.00344	0.00344	ERCEN	
	4-CHLOROTOLUENE	0.0034	U	U	0.00008	0.0034	MG/KG	
	BENZENE	0.0023	U	U	0.0001	0.0023	MG/KG	
	BROMOBENZENE	0.0023	U	U	0.00009	0.0023	MG/KG	
	BROMOCHLOROMETHANE	0.0023	U	U	0.00018	0.0023	MG/KG	
	BROMODICHLOROMETHANE	0.0046	U	U	0.0001	0.0046	MG/KG	
	BROMOFORM	0.0069	R	U	0.00018	0.0069	MG/KG	SSCCV%
	BROMOMETHANE	0.0057	R	U	0.0002	0.0057	MG/KG	SSCCV%
	CARBON TETRACHLORIDE	0.011	U	U	0.00016	0.011	MG/KG	
	CHLOROBENZENE	0.0023	U	U	0.00012	0.0023	MG/KG	
	CHLOROETHANE	0.0057	R	U	0.0003	0.0057	MG/KG	SSCCV%
	CHLOROFORM	0.0023	U	U	0.00015	0.0023	MG/KG	
	CHLOROMETHANE	0.008	R	U	0.00009	0.008	MG/KG	SSCCV%
	CIS-1,2-DICHLOROETHENE	0.0069	U	U	0.00008	0.0069	MG/KG	

CIS-1,3-DICHLOROPROPENE	0.0057	U	U	0.00011	0.0057	MG/KG	
DIBROMOCHLOROMETHANE	0.0034	U	U	0.00016	0.0034	MG/KG	
DIBROMOFLUOROMETHANE	96			0.00344	0.00344	ERCEN	
DIBROMOMETHANE	0.011	U	U	0.0002	0.011	MG/KG	
DICHLORODIFLUOROMETHANE	0.0057	R	U	0.00036	0.0057	MG/KG	CCVMISS
ETHYLBENZENE	0.0034	U	U	0.00012	0.0034	MG/KG	
HEXACHLOROBUTADIENE	0.0057	U	U	0.0002	0.0057	MG/KG	
ISOPROPYLBENZENE	0.0092	U	U	0.00013	0.0092	MG/KG	
M,P-XYLENE	0.008	U	U	0.00022	0.008	MG/KG	
METHYLENE CHLORIDE	0.0025	R		0.00021	0.0023	MG/KG	SSCCV%
METHYLENE CHLORIDE	0.0025	R		0.00021	0.0023	MG/KG	CV%D
METHYLENE CHLORIDE	0.0025	R		0.00021	0.0023	MG/KG	IC%RSI
N-BUTYLBENZENE	0.0057	U	U	0.00011	0.0057	MG/KG	
N-PROPYLBENZENE	0.0023	U	U	0.00009	0.0023	MG/KG	
NAPHTHALENE	0.0023	R	U	0.00012	0.0023	MG/KG	SSCCV%
O-XYLENE	0.0057	U	U	0.00013	0.0057	MG/KG	
P-ISOPROPYLtolUENE	0.0069	U	U	0.00009	0.0069	MG/KG	
SEC-BUTYLBENZENE	0.008	U	U	0.00012	0.008	MG/KG	
STYRENE	0.0023	U	U	0.00012	0.0023	MG/KG	
TERT-BUTYLBENZENE	0.008	U	U	0.00013	0.008	MG/KG	
TETRACHLOROETHENE	0.008	U	U	0.00017	0.008	MG/KG	
TOLUENE	0.0057	U	U	0.00014	0.0057	MG/KG	
TOLUENE-D8	103			0.00344	0.00344	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.0034	U	U	0.00009	0.0034	MG/KG	
TRANS-1,3-DICHLOROPROPENE	0.0057	U	U	0.00017	0.0057	MG/KG	
TRICHLOROETHENE	0.011	R	U	0.0001	0.011	MG/KG	SSCCV%
TRICHLOROFUOROMETHANE	0.0046	R	U	0.00022	0.0046	MG/KG	SSCCV%
VINYL CHLORIDE	0.01	R	U	0.00016	0.01	MG/KG	SSCCV%

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA030	1,1,1,2-TETRACHLOROETHANE	0.0035	U	U	0.00015	0.0035	MG/KG	
	1,1,1-TRICHLOROETHANE	0.0047	U	U	0.00013	0.0047	MG/KG	
	1,1,2,2-TETRACHLOROETHANE	0.0023	R	U	0.00017	0.0023	MG/KG	SSCCV%
	1,1,2-TRICHLOROETHANE	0.0059	U	U	0.00016	0.0059	MG/KG	
	1,1-DICHLOROETHANE	0.0023	U	U	0.00011	0.0023	MG/KG	
	1,1-DICHLOROETHENE	0.007	U	U	0.00015	0.007	MG/KG	
	1,1-DICHLOROPROPENE	0.0059	U	U	0.00014	0.0059	MG/KG	
	1,2,3-TRICHLOROBENZENE	0.0023	R	U	0.00015	0.0023	MG/KG	SSCCV%
	1,2,3-TRICHLOROPROPANE	0.023	U	U	0.00015	0.023	MG/KG	
	1,2,4-TRICHLOROBENZENE	0.0023	R	U	0.00013	0.0023	MG/KG	SSCCV%
	1,2,4-TRIMETHYLBENZENE	0.0082	U	U	0.00009	0.0082	MG/KG	
	2-DIBROMO-3-CHLOROPROPANE	0.012	R	U	0.00025	0.012	MG/KG	SSCCV%
	1,2-DIBROMOETHANE	0.0035	R	U	0.00019	0.0035	MG/KG	SSCCV%
	1,2-DICHLOROBENZENE	0.0023	U	U	0.0001	0.0023	MG/KG	
	1,2-DICHLOROETHANE	0.0035	U	U	0.00033	0.0035	MG/KG	
	1,2-DICHLOROPROPANE	0.0023	U	U	0.00009	0.0023	MG/KG	
	1,3,5-TRIMETHYLBENZENE	0.0035	U	U	0.0001	0.0035	MG/KG	
	1,3-DICHLOROBENZENE	0.007	U	U	0.00005	0.007	MG/KG	
	1,3-DICHLOROPROPANE	0.0023	U	U	0.00015	0.0023	MG/KG	
	1,4-DICHLOROBENZENE	0.0023	U	U	0.00012	0.0023	MG/KG	
	2,2-DICHLOROPROPANE	0.023	U	U	0.00032	0.023	MG/KG	
	2-CHLOROTOLUENE	0.0023	U	U	0.0001	0.0023	MG/KG	
	4-BROMOFLUOROBENZENE	110			0.00351	0.00351	ERCEN	
	4-CHLOROTOLUENE	0.0035	U	U	0.00008	0.0035	MG/KG	
	BENZENE	0.0023	U	U	0.0001	0.0023	MG/KG	

6521096

9711262 SW8260A

Page 8 of 10

BROMOBENZENE	0.0023	U	U	0.00009	0.0023	MG/KG	
BROMOCHLOROMETHANE	0.0023	U	U	0.00018	0.0023	MG/KG	
BROMODICHLOROMETHANE	0.0047	U	U	0.0001	0.0047	MG/KG	
BROMOFORM	0.007	R	U	0.00018	0.007	MG/KG	SSCCV%
BROMOMETHANE	0.0059	R	U	0.0002	0.0059	MG/KG	SSCCV%
CARBON TETRACHLORIDE	0.012	U	U	0.00016	0.012	MG/KG	
CHLOROBENZENE	0.0023	U	U	0.00012	0.0023	MG/KG	
CHLOROETHANE	0.0059	R	U	0.0003	0.0059	MG/KG	SSCCV%
CHLOROFORM	0.0023	U	U	0.00015	0.0023	MG/KG	
CHLOROMETHANE	0.0082	R	U	0.00009	0.0082	MG/KG	SSCCV%
CIS-1,2-DICHLOROETHENE	0.007	U	U	0.00008	0.007	MG/KG	
CIS-1,3-DICHLOROPROPENE	0.0059	U	U	0.00011	0.0059	MG/KG	
DIBROMOCHLOROMETHANE	0.0035	U	U	0.00016	0.0035	MG/KG	
DIBROMOFLUOROMETHANE	100			0.00351	0.00351	ERCEN	
DIBROMOMETHANE	0.012	U	U	0.0002	0.012	MG/KG	
DICHLORODIFLUOROMETHANE	0.0059	R	U	0.00036	0.0059	MG/KG	CCVMISS1
ETHYLBENZENE	0.0035	U	U	0.00012	0.0035	MG/KG	
HEXACHLOROBUTADIENE	0.0059	U	U	0.0002	0.0059	MG/KG	
ISOPROPYLBENZENE	0.0094	U	U	0.00013	0.0094	MG/KG	
M,P-XYLENE	0.0082	U	U	0.00022	0.0082	MG/KG	
METHYLENE CHLORIDE	0.0027	R		0.00021	0.0023	MG/KG	CV%D
METHYLENE CHLORIDE	0.0027	R		0.00021	0.0023	MG/KG	IC%RSI
METHYLENE CHLORIDE	0.0027	R		0.00021	0.0023	MG/KG	SSCCV%
N-BUTYLBENZENE	0.0059	U	U	0.00011	0.0059	MG/KG	
N-PROPYLBENZENE	0.0023	U	U	0.00009	0.0023	MG/KG	
NAPHTHALENE	0.0023	R	U	0.00012	0.0023	MG/KG	SSCCV%
O-XYLENE	0.0059	U	U	0.00013	0.0059	MG/KG	—
P-ISOPROPYLtolUENE	0.007	U	U	0.00009	0.007	MG/KG	
SEC-BUTYLBENZENE	0.0082	U	U	0.00012	0.0082	MG/KG	
STYRENE	0.0023	U	U	0.00012	0.0023	MG/KG	
TERT-BUTYLBENZENE	0.0082	U	U	0.00013	0.0082	MG/KG	—
TETRAChLOROETHENE	0.0082	U	U	0.00017	0.0082	MG/KG	—
TOLUENE	0.0059	U	U	0.00014	0.0059	MG/KG	
TOLUENE-D8	105			— 0.00351	0.00351	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.0035	U	U	0.00009	0.0035	MG/KG	
TRANS-1,3-DICHLOROPROPENE	0.0059	U	U	0.00017	0.0059	MG/KG	
TRICHLOROETHENE	0.012	R	U	0.0001	0.012	MG/KG	SSCCV%
TRICHLOROFUOROMETHANE	0.0047	R	U	0.00022	0.0047	MG/KG	SSCCV%
VINYL CHLORIDE	0.011	R	U	0.00016	0.011	MG/KG	SSCCV%

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlocal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

6521098
9711262 SW8260A

Page 10 of 10

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D critera
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

**SDG 9711302****Method SW8260A****Reviewer nh****Date 3/6/98****Matrix water and soil**

Senior Review Vito D'Aurora

Field Samples - 1-Soil Sample

Field ID	QAQC Type	Field ID	QAQC Type	Field ID	QAQC Type
Soil AHA036	N	LABQC	BD		
Water AHA034TB1	TB	AHA035EB1	EB	LABQC	BD

**1. Case Narrative
Items of Interest**

- Both the water and soil method blanks had Methylene Chloride detected > the reporting limit. This compound was detected in samples 2 and 3 below the calculated value, so the data were flagged U (by the lab).
- All water LCS/LCD recoveries and RPDs were within acceptance criteria with the exception of Methylene Chloride in the LCS.
- All soil LCS/LCD recoveries and RPDs were within acceptance criteria with the exception of Chloroethane in the LCS/LCD. No hits detected in the soil sample.
- Water MS/MSDs were not performed due to insufficient volume. Soil MS/MSDs were performed; however, due to inconsistencies in the soil's purging efficiency, the data are not available.
- Several compounds from the ICV/CCV order curve were within the acceptance limit but exceeded the 15% RSD criteria. These were quantitated using the average response factor due to software problem.

2. Blank Summary**Field Blanks All criteria were met.****Method Blanks**

- Both the water and soil method blanks had Methylene Chloride detected > the reporting limit. This compound was detected in samples 2 and 3 below the calculated value, so the data were flagged U (by the lab). No validation necessary.

6521100
9711302 SW8260A

Page 2 of 8

<u>Blank Type</u>	<u>Blank ID</u>	<u>Analyte</u>	<u>Result</u>	<u>ReportLimit</u>	<u>LabFlag</u>	<u>Units</u>
LB	LABQC	METHYLENE CHLORI	0.0066	0.00021		MG/KG
LB	LABQC	METHYLENE CHLORI	1.1	0.21		UG/L

3. Spikes and Duplicates

Field Duplicates None

Laboratory Duplicates None

Matrix Spike Water MS/MSDs were not performed due to insufficient volume. Soil MS/MSDs were performed; however, due to inconsistencies in the soil's purging efficiency, the data are not available.

4. Laboratory Control Sample

1. All water LCS/LCD recoveries and RPDs were within acceptance criteria with the exception of Methylene Chloride in the LCS. Field blanks not flagged.
2. All soil LCS/LCD recoveries and RPDs were within acceptance criteria with the exception of Chloroethane in the LCS/LCD and Chloromethane in the LCD. No hits detected in the soil sample so no flagging applied.

<u>Matrix</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>Analyte</u>	<u>Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>	
WATER	BS	LABQC	METHYLENE CHLORIDE	-	73	75	125
SOIL	BS	LABQC	CHLOROETHANE	138	55	135	
SOIL	BD	LABQC	CHLOROETHANE	146	55	135	
SOIL	BD	LABQC	CHLOROMETHANE	139	65	135	

5. Surrogates

All surrogate recoveries were within acceptance criteria.

6. Tuning and Mass Calibration

All criteria met.

7. Internal Standard

All internal standard recoveries were within acceptance criteria.

8. Calibration Information

Initial Calibration 1. Methylene Chloride from the 12/03/97 water ICAL order curve exceeded the %

6521101

RSD criteria. The field blanks were not validated.

2. Methylene Chloride from the 11/24/97 soil ICAL order curve exceeded criteria. The applicable sample was flagged R.

<u>Field ID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation Reason</u>
AHA036	METHYLENE CHLORIDE	R	IC%RSD

Continuing Calibration

1. Seven compounds were missing from the 12/3/97 water 2nd source CCV and one compound fell outside the expected value. The field blanks were not validated.
2. 1-Chlorohexane and Dichlorodifluoromethane were not listed on the 11/24/97 2nd source CCV probably due to not being detected or co-elution. These analytes were flagged R on the soil sample.
3. Fourteen analytes exceeded %D criteria on the 11/24/97 2nd source CCV and were flagged R.
4. Six compounds from the 12/5/97 soil CCV exceeded the expected value and the sample was flagged R.

<u>Field ID</u>	<u>LabsampleID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation</u>
AHA036	9711302-3	1,1,2,2-TETRACHLOROETHANE	R	CV%D
AHA036	9711302-3	1,2,3-TRICHLOROPROPANE	R	CV%D
AHA036	9711302-3	1-DIBROMO-3-CHLOROPROPANE	R	CV%D
AHA036	9711302-3	1,2-DICHLOROETHANE	R	CV%D
AHA036	9711302-3	1-CHLOROHEXANE	R	CCVMIS:
AHA036	9711302-3	BROMOFORM	R	CV%D
AHA036	9711302-3	DICHLORODIFLUOROMETHANE	R	CCVMIS:
AHA036	9711302-3	METHYLENE CHLORIDE	R	CV%D

9. Holding Time

Holding times were met.

10. Summary

General Comments

1. Methylene Chloride from the 11/24/97 soil ICAL order curve exceeded criteria. The applicable sample was flagged R.
2. 1-Chlorohexane and Dichlorodifluoromethane were not listed on the 2nd source CCV probably due to not being detected or co-elution. These analytes were flagged R on the soil sample.
3. Fourteen analytes exceeded %D criteria on the 2nd source CCV and were flagged R.
4. Six compounds from the 12/5/97 soil CCV exceeded the expected value and the sample was flagged R.

Data Package Completeness Waiting for missing pages from Paragon (2nd page soil CCV). Called Lori on 3/5/98 to have the pages faxed. Called on 3/6/98, still haven't received. Received faxed pages on 3/9/98 approx. 3:00.

Forms Review/ Items of Interest Nothing of interest.

6521102

9711302 SW8260A

Page 4 of 8

COC Review Complete

- Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA036	1,1,1,2-TETRACHLOROETHANE	0.0034	U	U	0.00015	0.0034	MG/KG	
	1,1,1-TRICHLOROETHANE	0.0045	U	U	0.00013	0.0045	MG/KG	
	1,1,2,2-TETRACHLOROETHANE	0.0023	R	U	0.00017	0.0023	MG/KG	CV%D
	1,1,2,2-TETRACHLOROETHANE	0.0023	R	U	0.00017	0.0023	MG/KG	SSCCV%
	1,1,2-TRICHLOROETHANE	0.0056	U	U	0.00016	0.0056	MG/KG	
	1,1-DICHLOROETHANE	0.0023	U	U	0.00011	0.0023	MG/KG	
	1,1-DICHLOROETHENE	0.0068	U	U	0.00015	0.0068	MG/KG	
	1,1-DICHLOROPROPENE	0.0056	U	U	0.00014	0.0056	MG/KG	
	1,2,3-TRICHLOROBENZENE	0.0023	R	U	0.00015	0.0023	MG/KG	SSCCV%
	1,2,3-TRICHLOROPROPANE	0.023	R	U	0.00015	0.023	MG/KG	CV%D
	1,2,4-TRICHLOROBENZENE	0.0023	R	U	0.00013	0.0023	MG/KG	SSCCV%
	1,2,4-TRIMETHYLBENZENE	0.0079	U	U	0.00009	0.0079	MG/KG	
	2-DIBROMO-3-CHLOROPROPANE	0.011	R	U	0.00025	0.011	MG/KG	CV%D
	2-DIBROMO-3-CHLOROPROPANE	0.011	R	U	0.00025	0.011	MG/KG	SSCCV%
	1,2-DIBROMOETHANE	0.0034	R	U	0.00019	0.0034	MG/KG	SSCCV%
	1,2-DICHLOROBENZENE	0.0023	U	U	0.0001	0.0023	MG/KG	
	1,2-DICHLOROETHANE	0.0034	R	U	0.00033	0.0034	MG/KG	CV%D
	1,2-DICHLOROPROPANE	0.0023	U	U	0.00009	0.0023	MG/KG	
	1,3,5-TRIMETHYLBENZENE	0.0034	U	U	0.0001	0.0034	MG/KG	
	1,3-DICHLOROBENZENE	0.0068	U	U	0.00005	0.0068	MG/KG	
	1,3-DICHLOROPROPANE	0.0023	U	U	0.00015	0.0023	MG/KG	
	1,4-DICHLOROBENZENE	0.0023	U	U	0.00012	0.0023	MG/KG	
	1-CHLOROHEXANE	0.0034	R	U	0.00014	0.0034	MG/KG	CCVMISSI
	2,2-DICHLOROPROPANE	0.023	U	U	0.00032	0.023	MG/KG	
	2-CHLOROTOLUENE	0.0023	U	U	0.0001	0.0023	MG/KG	
	4-BROMOFLUOROBENZENE	113			0.00338	0.00338	ERCEN	
	4-CHLOROTOLUENE	0.0034	U	U	0.00008	0.0034	MG/KG	
	BENZENE	0.0023	U	U	0.0001	0.0023	MG/KG	
	BROMOBENZENE	0.0023	U	U	0.00009	0.0023	MG/KG	
	BROMOCHLOROMETHANE	0.0023	U	U	0.00018	0.0023	MG/KG	
	BROMODICHLOROMETHANE	0.0045	U	U	0.0001	0.0045	MG/KG	
	BROMOFORM	0.0068	R	U	0.00018	0.0068	MG/KG	CV%D
	BROMOFORM	0.0068	R	U	0.00018	0.0068	MG/KG	SSCCV%
	BROMOMETHANE	0.0056	R	U	0.0002	0.0056	MG/KG	SSCCV%
	CARBON TETRACHLORIDE	0.011	U	U	0.00016	0.011	MG/KG	
	CHLOROBENZENE	0.0023	U	U	0.00012	0.0023	MG/KG	
	CHLOROETHANE	0.0056	R	U	0.0003	0.0056	MG/KG	SSCCV%
	CHLOROFORM	0.0023	U	U	0.00015	0.0023	MG/KG	
	CHLOROMETHANE	0.0079	R	U	0.00009	0.0079	MG/KG	SSCCV%
	CIS-1,2-DICHLOROETHENE	0.0068	U	U	0.00008	0.0068	MG/KG	
	CIS-1,3-DICHLOROPROPENE	0.0056	U	U	0.00011	0.0056	MG/KG	
	DIBROMOCHLOROMETHANE	0.0034	U	U	0.00016	0.0034	MG/KG	
	DIBROMOFLUOROMETHANE	100			0.00338	0.00338	ERCEN	
	DIBROMOMETHANE	0.011	U	U	0.0002	0.011	MG/KG	
	DICHLORODIFLUOROMETHANE	0.0056	R	U	0.00036	0.0056	MG/KG	CCVMISSI
	ETHYLBENZENE	0.0034	U	U	0.00012	0.0034	MG/KG	
	HEXAChLOROBUTADIENE	0.0056	U	U	0.0002	0.0056	MG/KG	

6521104
9711302 'SW8260A

Page 6 of 8

ISOPROPYLBENZENE	0.009	U	U	0.00013	0.009	MG/KG	
M,P-XYLENE	0.0079	U	U	0.00022	0.0079	MG/KG	
METHYLENE CHLORIDE	0.0041	R	U	0.00021	0.0023	MG/KG	CV%D
METHYLENE CHLORIDE	0.0041	R	U	0.00021	0.0023	MG/KG	IC%RSI
METHYLENE CHLORIDE	0.0041	R	U	0.00021	0.0023	MG/KG	SSCCV%
N-BUTYLBENZENE	0.0056	U	U	0.00011	0.0056	MG/KG	
N-PROPYLBENZENE	0.0023	U	U	0.00009	0.0023	MG/KG	
NAPHTHALENE	0.0023	R	U	0.00012	0.0023	MG/KG	SSCCV%
O-XYLENE	0.0056	U	U	0.00013	0.0056	MG/KG	
P-ISOPROPYLtolUENE	0.0068	U	U	0.00009	0.0068	MG/KG	
SEC-BUTYLBENZENE	0.0079	U	U	0.00012	0.0079	MG/KG	
STYRENE	0.0023	U	U	0.00012	0.0023	MG/KG	
TERT-BUTYLBENZENE	0.0079	U	U	0.00013	0.0079	MG/KG	
TETRACHLOROETHENE	0.0079	U	U	0.00017	0.0079	MG/KG	
TOLUENE	0.0056	U	U	0.00014	0.0056	MG/KG	
TOLUENE-D8	99			0.00338	0.00338	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.0034	U	U	0.00009	0.0034	MG/KG	
TRANS-1,3-DICHLOROPROPENE	0.0056	U	U	0.00017	0.0056	MG/KG	
TRICHLOROETHENE	0.011	R	U	0.0001	0.011	MG/KG	SSCCV%
TRICHLOROFUOROMETHANE	0.0045	R	U	0.00022	0.0045	MG/KG	SSCCV%
VINYL CHLORIDE	0.01	R	U	0.00016	0.01	MG/KG	SSCCV%

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatnx	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

6521106

9711302 SW8260A

Page 8 of 8

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

6521107



CH2MHILL

NAS FW JRB AOC 2

Data Quality Evaluation

SDG 9711317

Method SW9060

Reviewer nh

Date 4/16/98

Matrix water

Senior Review Vito D'Aurora

Field Samples None

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
-----------------	------------------	-----------------	------------------	-----------------	------------------

Water

AHA038EB1 EB

1. Case Narrative—
Items of Interest 1. All blanks were reported < the RL.

2. Blank Summary

Field Blanks Total Organic Carbon was not detected in the equipment blank.

Method Blanks All blanks were reported < the RL.

3. Spikes and Duplicates

Field Duplicates None

Laboratory Duplicates RPD criteria met.

Matrix Spike All criteria were met.

6521108

9711317 SW9060

Page 2 of 6

4. Laboratory Control Sample None

5. Surrogates Not applicable.

6. Tuning and Mass
Calibration Not applicable.

7. Internal Standard Not applicable.

8. Calibration Information

Initial Calibration All criteria were met.

Continuing Calibration All criteria were met.

9. Holding Time Holding times were met.

10. Summary

General Comments No flagging necessary.

Data Package Completeness 1. The soil TOC analysis will come in another SDG from RECRA Labnet incorporated into a Paragon package. Two soil analyses (AHA039 and 040) from SDG 9802049 will be validated with this water EB.

Forms Review/ Items of
Interest No items to note.

036521109

9711317 SW9060

Page 3 of 6

COC Review

The soil TOC analysis will come in another SDG from RECRA Labnet incorporated into a Paragon package. Three soil analyses (AHA039 and 040) from SDG 9802049 will be validated with this water EB.

: 6521110

9711317 SW9060

Page 4 of 6

6521111

Validation Flag Abbreviations

Abbreviation	Validation Reason
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range -
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not requested
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatnx	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

652112
9711317 SW9060

Page 6 of 6

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Tnp blank
TB<RL	Tnp blank concentration less than RL
TB>RL	Tnp blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Senal Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

6521113
CH2MHILL

NAS FW JRB AOC 2

Data Quality Evaluation

SDG 9711317

Method SW8260A

Reviewer nh

Date 3/6/98

Matrix water and soil

Senior Review Vito D'Aurora

Field Samples

1-Soil Sample

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
Soil					
AHA039	N	AHA040FD1	FD	LABQC	BD

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
Water					
AHA037TB1	TB	AHA038EB1	EB	LABQC	BD

1. Case Narrative Items of Interest

- Both the water and soil method blanks had Methylene Chloride detected > the reporting limit. This compound was detected in samples 2, 3 and 4 below the calculated value, so the data were flagged U (by the lab).
- All water LCS/LCD recoveries were within acceptance criteria with the exception of Methylene Chloride in the LCS.
- All soil LCS/LCD recoveries were within acceptance criteria with the exception of Chloromethane in the LCD and Chloroethane in the LCS/LCD. No hits detected in the soil sample.
- Several compounds from the ICV/CCV order curve were within the acceptance limit but exceeded the 15% RSD criteria. These were quantitated using the average response factor due to software problem.

2. Blank Summary

Field Blanks All criteria were met.

Method Blanks

- Both the water and soil method blanks had Methylene Chloride detected > the reporting limit. This compound was detected in samples 2, 3 and 4 below the calculated value, so the data were flagged U (by the lab). No validation necessary.

652114
9711317 SW8260A

Page 2 of 9

<u>Blank Type</u>	<u>Blank ID</u>	<u>Analyte</u>	<u>Result</u>	<u>ReportLimit</u>	<u>LabFlag</u>	<u>Units</u>
LB	LABQC	METHYLENE CHLORIDE	0.0066	0.00021		MG/KG
LB	LABQC	METHYLENE CHLORIDE	1.1	0.21		UG/L

3. Spikes and Duplicates

Field Duplicates All criteria were met.

Laboratory Duplicates None

Matrix Spike None

4. Laboratory Control Sample

1. All water LCS/LCD recoveries and RPDs were within acceptance criteria with the exception of Methylene Chloride in the LCS. Field blanks not flagged.
2. All soil LCS/LCD recoveries were within acceptance criteria with the exception of Chloromethane in the LCD and Chloroethane in the LCS/LCD. No hits detected in the soil sample.

<u>Matrix</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>Analyte</u>	<u>Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
WATER	BS	LABQC	METHYLENE CHLORIDE	73	75	125
SOIL	BS	—	CHLOROETHANE	138	—	135
SOIL	BD	—	CHLOROETHANE	146	55	135
SOIL	BD	LABQC	CHLOROMETHANE	139	65	135

5. Surrogates

All surrogate recoveries were within acceptance criteria.

6. Tuning and Mass Calibration

All criteria met.

7. Internal Standard

All internal standard recoveries were within acceptance criteria.

8. Calibration Information

Initial Calibration

1. Methylene Chloride from the 12/03/97 water ICAL order curve exceeded the % RSD criteria. The field blanks were not validated.
2. Methylene Chloride from the 11/24/97 soil ICAL order curve exceeded criteria. The applicable sample was flagged R.

<u>Field ID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation Reason</u>
AHA039	METHYLENE CHLORIDE	R	IC%RSD
AHA040FD1	METHYLENE CHLORIDE	R	IC%RSD

Continuing Calibration

1. The water CCV was not in the package.
2. Seven compounds were missing from the 12/3/97 water 2nd source CCV and one compound fell outside the expected value. The field blanks were not validated.
3. 1-Chlorohexane and Dichlorodifluoromethane were not listed on the 11/24/97 2nd source CCV. These analytes were flagged R on the soil sample.
4. Fourteen analytes exceeded %D criteria on the 11/24/97 2nd source CCV and were flagged R.
5. Six compounds from the 12/5/97 soil CCV exceeded the expected value and the sample was flagged R.

<u>Field ID</u>	<u>LabsampleID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation</u>
AHA039	9711317-3	1,1,2,2-TETRACHLOROETHANE	R	CV%D
AHA039	9711317-3	1,2,3-TRICHLOROPROPANE	R	CV%D
AHA039	9711317-3	1-DIBROMO-3-CHLOROPROPANE	R	CV%D
AHA039	9711317-3	1,2-DICHLOROETHANE	R	CV%D
AHA039	9711317-3	1-CHLOROHXANE	R	CCVMiss
AHA039	9711317-3	BROMOFORM	R	CV%D
AHA039	9711317-3	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA039	9711317-3	METHYLENE CHLORIDE	R	CV%D
AHA040FD1	9711317-4	1,1,2,2-TETRACHLOROETHANE	R	CV%D
AHA040FD1	9711317-4	1,2,3-TRICHLOROPROPANE	R	CV%D
AHA040FD1	9711317-4	1-DIBROMO-3-CHLOROPROPANE	R	CV%D
AHA040FD1	9711317-4	1,2-DICHLOROETHANE	R	CV%D
AHA040FD1	9711317-4	1-CHLOROHXANE	R	CCVMiss
AHA040FD1	9711317-4	BROMOFORM	R	CV%D
AHA040FD1	9711317-4	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA040FD1	9711317-4	METHYLENE CHLORIDE	R	CV%D

9. Holding Time

Holding times were met.

10. Summary

- General Comments**
1. Methylene Chloride from the 11/24/97 soil ICAL order curve exceeded criteria. The applicable sample was flagged R.
 2. Six compounds from the 12/5/97 soil CCV exceeded the expected value and the sample was flagged R.
 3. 1-Chlorohexane and Dichlorodifluoromethane were not listed on the 11/24/97 2nd source CCV probably due to not being detected or co-elution. These analytes were flagged R on the soil sample.
 4. Fourteen analytes exceeded %D criteria on the 11/24/97 2nd source CCV and were flagged R.

6521116

9711317, SW8260A

Page 4 of 9

Data Package Completeness 1. The water CCV was not in the package.
Missing various pages (2nd pages for soil and water LCD, 2nd and 3rd pages for soil CCV, 2nd source CCV and page 54 and 56). Called and left message with Lori on 3/9/98 and spoke with Deb later. Will fax these and have someone look over the rest of the SDGs. Received faxed pages on 3/9/98 approx. 3:00.

Forms Review/ Items of Interest Nothing of interest.

COC Review Complete

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA039	1,1,1,2-TETRACHLOROETHANE	0.0037	U	U	0 00015	0 0037	MG/KG	
	1,1,1-TRICHLOROETHANE	0.005	U	U	0 00013	0.005	MG/KG	
	1,1,2,2-TETRACHLOROETHANE	0.0025	R	U	0.00017	0.0025	MG/KG	CV%D
	1,1,2,2-TETRACHLOROETHANE	0.0025	R	U	0.00017	0.0025	MG/KG	SSCCV%
	1,1,2-TRICHLOROETHANE	0.0062	U	U	0.00016	0.0062	MG/KG	
	1,1-DICHLOROETHANE	0.0025	U	U	0.00011	0.0025	MG/KG	
	1,1-DICHLOROETHENE	0.0075	U	U	0.00015	0.0075	MG/KG	
	1,1-DICHLOROPROPENE	0.0062	U	U	0.00014	0.0062	MG/KG	
	1,2,3-TRICHLOROBENZENE	0.0025	R	U	0.00015	0.0025	MG/KG	SSCCV%
	1,2,3-TRICHLOROPROPANE	0.025	R	U	0.00015	0.025	MG/KG	CV%D
	1,2,4-TRICHLOROBENZENE	0.0025	R	U	0.00013	0.0025	MG/KG	SSCCV%
	1,2,4-TRIMETHYLBENZENE	0.0087	U	U	0.00009	0.0087	MG/KG	
	2-DIBROMO-3-CHLOROPROPAN	0.012	R	U	0.00025	0.012	MG/KG	CV%D
	2-DIBROMO-3-CHLOROPROPAN	0.012	R	U	0.00025	0.012	MG/KG	SSCCV%
	1,2-DIBROMOETHANE	0.0037	R	U	0.00019	0.0037	MG/KG	SSCCV%
	1,2-DICHLOROBENZENE	0.0025	U	U	0.0001	0.0025	MG/KG	
	1,2-DICHLOROETHANE	0.0037	R	U	0.00033	0.0037	MG/KG	CV%D
	1,2-DICHLOROPROPANE	0.0025	U	U	0.00009	0.0025	MG/KG	
	1,3,5-TRIMETHYLBENZENE	0.0037	U	U	0.0001	0.0037	MG/KG	
	1,3-DICHLOROBENZENE	0.0075	U	U	0.00005	0.0075	MG/KG	
	1,3-DICHLOROPROPANE	0.0025	U	U	0.00015	0.0025	MG/KG	
	1,4-DICHLOROBENZENE	0.0025	U	U	0.00012	0.0025	MG/KG	
	1-CHLOROHEXANE	0.0037	R	U	0.00014	0.0037	MG/KG	CCVMissi
	2,2-DICHLOROPROPANE	0.025	U	U	0.00032	0.025	MG/KG	
	2-CHLOROTOLUENE	0.0025	U	U	0.0001	0.0025	MG/KG	
	4-BROMOFLUOROBENZENE	108			0.00374	0.00374	ERCEN	
	4-CHLOROTOLUENE	0.0037	U	U	0.00008	0.0037	MG/KG	
	BENZENE	0.0025	U	U	0.0001	0.0025	MG/KG	
	BROMOBENZENE	0.0025	U	U	0.00009	0.0025	MG/KG	
	BROMOCHLOROMETHANE	0.0025	U	U	0.00018	0.0025	MG/KG	
	BROMODICHLOROMETHANE	0.005	U	U	0.0001	0.005	MG/KG	
	BROMOFORM	0.0075	R	U	0.00018	0.0075	MG/KG	CV%D
	BROMOFORM	0.0075	R	U	0.00018	0.0075	MG/KG	SSCCV%
	BROMOMETHANE	0.0062	R	U	0.0002	0.0062	MG/KG	SSCCV%
	CARBON TETRACHLORIDE	0.012	U	U	0.00016	0.012	MG/KG	
	CHLOROBENZENE	0.0025	U	U	0.00012	0.0025	MG/KG	
	CHLOROETHANE	0.0062	R	U	0.0003	0.0062	MG/KG	SSCCV%
	CHLOROFORM	0.0025	U	U	0.00015	0.0025	MG/KG	
	CHLOROMETHANE	0.0087	R	U	0.00009	0.0087	MG/KG	SSCCV%
	CIS-1,2-DICHLOROETHENE	0.0075	U	U	0.00008	0.0075	MG/KG	
	CIS-1,3-DICHLOROPROPENE	0.0062	U	U	0.00011	0.0062	MG/KG	
	DIBROMOCHLOROMETHANE	0.0037	U	U	0.00016	0.0037	MG/KG	
	DIBROMOFLUOROMETHANE	101			0.00374	0.00374	ERCEN	
	DIBROMOMETHANE	0.012	U	U	0.0002	0.012	MG/KG	
	DICHLORODIFLUOROMETHANE	0.0062	R	U	0.00036	0.0062	MG/KG	CCVMissi
	ETHYLBENZENE	0.0037	U	U	0.00012	0.0037	MG/KG	
	HEXAChLOROBUTADIENE	0.0062	U	U	0.0002	0.0062	MG/KG	

6521118

9711317 SW8260A

Page 6 of 9

ISOPROPYLBENZENE	0.01	U	U	0.00013	0.01	MG/KG	
M,P,XYLENE	0.0087	U	U	0.00022	0.0087	MG/KG	
METHYLENE CHLORIDE	0.0059	R	U	0.00021	0.0025	MG/KG	SSCCV%
METHYLENE CHLORIDE	0.0059	R	U	0.00021	0.0025	MG/KG	CV%D
METHYLENE CHLORIDE	0.0059	R	U	0.00021	0.0025	MG/KG	IC%RSI
N-BUTYLBENZENE	0.0062	U	U	0.00011	0.0062	MG/KG	
N-PROPYLBENZENE	0.0025	U	U	0.00009	0.0025	MG/KG	
NAPHTHALENE	0.0025	R	U	0.00012	0.0025	MG/KG	SSCCV%
O-XYLENE	0.0062	U	U	0.00013	0.0062	MG/KG	
P-ISOPROPYLtolUENE	0.0075	U	U	0.00009	0.0075	MG/KG	
SEC-BUTYLBENZENE	0.0087	U	U	0.00012	0.0087	MG/KG	
STYRENE	0.0025	U	U	0.00012	0.0025	MG/KG	
TERT-BUTYLBENZENE	0.0087	U	U	0.00013	0.0087	MG/KG	
TETRACHLOROETHENE	0.0087	U	U	0.00017	0.0087	MG/KG	
TOLUENE	0.0062	U	U	0.00014	0.0062	MG/KG	
TOLUENE-D8	104			0.00374	0.00374	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.0037	U	U	0.00009	0.0037	MG/KG	
TRANS-1,3-DICHLOROPROPENE	0.0062	U	U	0.00017	0.0062	MG/KG	
TRICHLOROETHENE	0.012	R	U	0.0001	0.012	MG/KG	SSCCV%
TRICHLOROFUOROMETHANE	0.005	R	U	0.00022	0.005	MG/KG	SSCCV%
VINYL CHLORIDE	0.011	R	U	0.00016	0.011	MG/KG	SSCCV%

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA040FD1	1,1,1,2-TETRACHLOROETHANE	0.0032	U	U	0.00015	0.0032	MG/KG	
	1,1,1-TRICHLOROETHANE	0.0043	U	U	0.00013	0.0043	MG/KG	
	1,1,2,2-TETRACHLOROETHANE	0.0021	R	U	0.00017	0.0021	MG/KG	CV%D
	1,1,2,2-TETRACHLOROETHANE	0.0021	R	U	0.00017	0.0021	MG/KG	SSCCV%
	1,1,2-TRICHLOROETHANE	0.0054	U	U	0.00016	0.0054	MG/KG	
	1,1-DICHLOROETHANE	0.0021	U	U	0.00011	0.0021	MG/KG	
	1,1-DICHLOROETHENE	0.0064	U	U	0.00015	0.0064	MG/KG	
	1,1-DICHLOROPROPENE	0.0054	U	U	0.00014	0.0054	MG/KG	
	1,2,3-TRICHLOROBENZENE	0.0021	R	U	0.00015	0.0021	MG/KG	SSCCV%
	1,2,3-TRICHLOROPROPANE	0.021	R	U	0.00015	0.021	MG/KG	CV%D
	1,2,4-TRICHLOROBENZENE	0.0021	R	U	0.00013	0.0021	MG/KG	SSCCV%
	1,2,4-TRIMETHYLBENZENE	0.0075	U	U	0.00009	0.0075	MG/KG	
	2-DIBROMO-3-CHLOROPROPANE	0.011	R	U	0.00025	0.011	MG/KG	CV%D
	2-DIBROMO-3-CHLOROPROPANE	0.011	R	U	0.00025	0.011	MG/KG	SSCCV%
	1,2-DIBROMOETHANE	0.0032	R	U	0.00019	0.0032	MG/KG	SSCCV%
	1,2-DICHLOROBENZENE	0.0021	U	U	0.0001	0.0021	MG/KG	
	1,2-DICHLOROETHANE	0.0032	R	U	0.00033	0.0032	MG/KG	CV%D
	1,2-DICHLOROPROPANE	0.0021	U	U	0.00009	0.0021	MG/KG	
	1,3,5-TRIMETHYLBENZENE	0.0032	U	U	0.0001	0.0032	MG/KG	
	-1,3-DICHLOROBENZENE	0.0064	U	U	0.00005	0.0064	MG/KG	
	1,3-DICHLOROPROPANE	0.0021	U	U	0.00015	0.0021	MG/KG	
	1,4-DICHLOROBENZENE	0.0021	U	U	0.00012	0.0021	MG/KG	
	1-CHLOROHEXANE	0.0032	R	U	0.00014	0.0032	MG/KG	CCVMISS
	2,2-DICHLOROPROPANE	0.021	U	U	0.00032	0.021	MG/KG	
	2-CHLOROTOLUENE	0.0021	U	U	0.0001	0.0021	MG/KG	
	4-BROMOFLUOROBENZENE	107			0.00321	0.00321	ERCEN	
	4-CHLOROTOLUENE	0.0032	U	U	0.00008	0.0032	MG/KG	
	BENZENE	0.0021	U	U	0.0001	0.0021	MG/KG	
	BROMOBENZENE	0.0021	U	U	0.00009	0.0021	MG/KG	
	BROMOCHLOROMETHANE	0.0021	U	U	0.00018	0.0021	MG/KG	
	BROMODICHLOROMETHANE	0.0043	U	U	0.0001	0.0043	MG/KG	
	BROMOFORM	0.0064	R	U	0.00018	0.0064	MG/KG	CV%D

BROMOFORM	0.0064	R	U	0.00018	0.0064	MG/KG	SSCCV%
BROMOMETHANE	0.0054	R	U	0.0002	0.0054	MG/KG	SSCCV%
CARBON TETRACHLORIDE	0.011	U	U	0.00016	0.011	MG/KG	
CHLOROBENZENE	0.0021	U	U	0.00012	0.0021	MG/KG	
CHLOROETHANE	0.0054	R	U	0.0003	0.0054	MG/KG	SSCCV%
CHLOROFORM	0.0021	U	U	0.00015	0.0021	MG/KG	
CHLOROMETHANE	0.0075	R	U	0.00009	0.0075	MG/KG	SSCCV%
CIS-1,2-DICHLOROETHENE	0.0064	U	U	0.00008	0.0064	MG/KG	
CIS-1,3-DICHLOROPROPENE	0.0054	U	U	0.00011	0.0054	MG/KG	
DIBROMOCHLOROMETHANE	0.0032	U	U	0.00016	0.0032	MG/KG	
DIBROMOFLUOROMETHANE	103			0.00321	0.00321	ERCEN	
DIBROMOMETHANE	0.011	U	U	0.0002	0.011	MG/KG	
DICHLORODIFLUOROMETHANE	0.0054	R	U	0.00036	0.0054	MG/KG	CCVMiss:
ETHYLBENZENE	0.0032	U	U	0.00012	0.0032	MG/KG	
HEXACHLOROBUTADIENE	0.0054	U	U	0.0002	0.0054	MG/KG	
ISOPROPYLBENZENE	0.0086	U	U	0.00013	0.0086	MG/KG	
- M,P-XYLENE	0.0075	U	U	0.00022	0.0075	MG/KG	
METHYLENE CHLORIDE	0.0058	R	U	0.00021	0.0021	MG/KG	CV%D
METHYLENE CHLORIDE	0.0058	R	U	0.00021	0.0021	MG/KG	IC%RSI
N-BUTYLBENZENE	0.0054	U	U	0.00011	0.0054	MG/KG	SSCCV%
N-PROPYLBENZENE	0.0021	U	U	0.00009	0.0021	MG/KG	
NAPHTHALENE	0.0021	R	U	0.00012	0.0021	MG/KG	SSCCV%
O-XYLENE	0.0054	U	U	0.00013	0.0054	MG/KG	
P-ISOPROPYLtolUENE	0.0064	U	U	0.00009	0.0064	MG/KG	
SEC-BUTYLBENZENE	0.0075	U	U	0.00012	0.0075	MG/KG	
- STYRENE	0.0021	U	U	0.00012	0.0021	MG/KG	
TERT-BUTYLBENZENE	0.0075	U	U	0.00013	0.0075	MG/KG	
TETRACHLOROETHENE	0.0075	U	U	0.00017	0.0075	MG/KG	
TOLUENE	0.0054	U	U	0.00014	0.0054	MG/KG	
TOLUENE-D8	97			0.00321	0.00321	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.0032	U	U	0.00009	0.0032	MG/KG	
TRANS-1,3-DICHLOROPROPENE	0.0054	U	U	0.00017	0.0054	MG/KG	
TRICHLOROETHENE	0.011	R	U	0.0001	0.011	MG/KG	SSCCV%
TRICHLOROFUOROMETHANE	0.0043	R	U	0.00022	0.0043	MG/KG	SSCCV%
VINYL CHLORIDE	0.0096	R	U	0.00016	0.0096	MG/KG	SSCCV%

Validation Flag Abbreviations

Abbreviation	Validation Reason
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range -
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded -
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was <u>not</u> required
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS-	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatnx	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFlag	Lab R flag removed; Re-analysis confirmed matnx effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

6521122
NAS FW JRB AOC 2



CH2MHILL

Data Quality Evaluation

SDG 9712023

Method SW8260A

Reviewer nh

Date 3/9/98

Matrix water and soil

Senior Review Vito D'Aurora

Field Samples

1-Soil Sample

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
Soil					
AHA043	N	LABQC	BD		
Water					
AHA041TB1	TB	AHA042EB1	EB		

1. Case Narrative Items of Interest

- Both the water and soil method blanks had Methylene Chloride detected > the reporting limit. This compound was detected in samples.
- All water LCS/LCD recoveries were within acceptance criteria with the exception of Methylene Chloride.
- All soil LCS/LCD recoveries were within acceptance criteria with the exception of Dichlorofluoromethane in the LCS and Methylene Chloride in the LCD. Dichlorofluoromethane, Vinyl Chloride and Methylene Chloride had RPDs outside criteria.
- Water MS/MSDs were not performed due to insufficient volume. Soil MS/MSDs clogged the purge lines. To prevent further problems, they were not re-analyzed.
- Several compounds from the ICV/CCV order curve were within the acceptance limit but exceeded the 15% RSD criteria. These were quantitated using the average response factor due to software problem.

2. Blank Summary

Field Blanks All criteria were met.

Method Blanks

- Both the water and soil method blanks had Methylene Chloride detected > the reporting limit. This compound was detected in the samples below the calculated value, so the data were flagged U (by the lab). No validation necessary.

6521123

9712023 SW8260A

Page 2 of 8

<u>Blank Type</u>	<u>Blank ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Report Limit</u>	<u>LabFlag</u>	<u>Units</u>
LB	LABQC	METHYLENE CHLORI	0.0025	0.00021		MG/KG

3. Spikes and Duplicates**Field Duplicates** None**Laboratory Duplicates** None**Matrix Spike** None**4. Laboratory Control Sample**

2. All water LCS/LCD recoveries were within acceptance criteria with the exception of Methylene Chloride. Field blanks not flagged.
3. All soil LCS/LCD recoveries were within acceptance criteria with the exception of Dichlorofluoromethane in the LCS and Methylene Chloride in the LCS/LCD. The sample was R flagged for the non-detects.

<u>Matrix</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>Analyte</u>	<u>Recovery</u>	<u>LowerLimit</u>	<u>UpperLimit</u>
SOIL	BS	LABQC	DICHLORODIFLUOROMET	52	65	135
SOIL	BS	LABQC	METHYLENE CHLORIDE	58	65	135
SOIL	BD	LABQC	METHYLENE CHLORIDE	57	65	135

5. Surrogates

- All surrogate recoveries were within acceptance criteria.

6. Tuning and Mass Calibration

All criteria met.

7. Internal Standard

- All internal standard recoveries were within acceptance criteria.

8. Calibration Information**Initial Calibration**

1. Methylene Chloride, Naphthalene and 1,2,3-Trichlorobenzene from the 12/11/97 water ICAL order curve exceeded the % RSD criteria. The field blanks were not validated.
2. Chloroethane and Methylene Chloride from the 12/10/97 soil ICAL order curve exceeded criteria. The applicable sample was flagged R.

<u>Field ID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation Reason</u>
-----------------	----------------	------------------------	--------------------------

REFSID

6521124

AHA043	CHLOROETHANE	R	IC%RSD
AHA043	METHYLENE CHLORIDE	R	IC%RSD

Continuing Calibration

1. Seven compounds were missing from the 12/11/97 water 2nd source CCV and two compounds fell outside the expected value. The field blanks were not validated.
2. Methylene Chloride and Naphthalene fell outside the expected value in the 12/11/97 CCV and the sample was marked R.
3. Seven compounds were missing from the 12/09/97 soil 2nd source CCV. These were flagged R in the sample.
4. 1,1-Dichloroethene and Methylene Chloride exceeded the expected value in the soil CCV of 12/09/97 and the sample was flagged R.

<u>Field ID</u>	<u>LabsampleID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation</u>
AHA043	9712023-3	1-CHLOROHEXANE	R	CCVMiss
AHA043	9712023-3	BROMOMETHANE	R	CCVMiss
AHA043	9712023-3	CHLOROETHANE	R	CCVMiss
AHA043	9712023-3	CHLOROMETHANE	R	CCVMiss
AHA043	9712023-3	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA043	9712023-3	METHYLENE CHLORIDE	R	CV%D
AHA043	9712023-3	NAPHTHALENE	R	CV%D
AHA043	9712023-3	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA043	9712023-3	VINYL CHLORIDE	R	CCVMiss

9. Holding TimeHolding times were met.**10. Summary****General Comments**

1. Chloroethane and Methylene Chloride from the 12/10/97 soil ICV order curve exceeded criteria. The applicable sample was flagged R.
2. Methylene Chloride and Naphthalene fell outside the expected in the 12/11/97 CCV value and the sample was marked R.
3. Seven compounds were missing from the 12/09/97 soil 2nd source CCV. These were flagged R in the sample.
4. 1,1-Dichloroethene and Methylene Chloride in the soil CCV of 12/09/97 exceeded the expected value and the sample was flagged R.
5. All soil LCS/LCD recoveries were within acceptance criteria with the exception of Dichlorofluoromethane in the LCS and Methylene Chloride in the LCS/LCD. The sample was R flagged for the non-detects.

Data Package Completeness Missing pages 20-21,32 and 41. Spoke with Deb on 3/9/98. Will fax these and have someone look over the rest of the SDGs.

Forms Review/ Items of Interest Nothing of interest.

6521125

9712023 SW8260A

Page 4 of 8

COC Review Complete

V11S03

6521126

- Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA043	1,1,1,2-TETRACHLOROETHANE	0.0034	U	U	0.00015	0.0034	MG/KG	
	1,1,1-TRICHLOROETHANE	0.0046	U	U	0.00013	0.0046	MG/KG	
	1,1,2,2-TETRACHLOROETHANE	0.0023	U	U	0.00017	0.0023	MG/KG	
	1,1,2-TRICHLOROETHANE	0.0057	U	U	0.00016	0.0057	MG/KG	
	1,1-DICHLOROETHANE	0.0023	U	U	0.00011	0.0023	MG/KG	
	1,1-DICHLOROETHENE	0.0069	R	U	0.00015	0.0069	MG/KG	SSCCV%
	1,1-DICHLOROPROPENE	0.0057	U	U	0.00014	0.0057	MG/KG	
	1,2,3-TRICHLOROBENZENE	0.0023	U	U	0.00015	0.0023	MG/KG	
	1,2,3-TRICHLOROPROPANE	0.023	U	U	0.00015	0.023	MG/KG	
	1,2,4-TRICHLOROBENZENE	0.0023	U	U	0.00013	0.0023	MG/KG	
	1,2,4-TRIMETHYLBENZENE	0.008	U	U	0.00009	0.008	MG/KG	
	2-DIBROMO-3-CHLOROPROPANE	0.011	U	U	0.00025	0.011	MG/KG	
	1,2-DIBROMOETHANE	0.0034	U	U	0.00019	0.0034	MG/KG	
	1,2-DICHLOROBENZENE	0.0023	U	U	0.0001	0.0023	MG/KG	
	1,2-DICHLOROETHANE	0.0034	U	U	0.00033	0.0034	MG/KG	
	1,2-DICHLOROPROPANE	0.0023	U	U	0.00009	0.0023	MG/KG	
	1,3,5-TRIMETHYLBENZENE	0.0034	U	U	0.0001	0.0034	MG/KG	
	1,3-DICHLOROBENZENE	0.0069	U	U	0.00005	0.0069	MG/KG	
	1,3-DICHLOROPROPANE	0.0023	U	U	0.00015	0.0023	MG/KG	
	1,4-DICHLOROBENZENE	0.0023	U	U	0.00012	0.0023	MG/KG	
	1-CHLOROHEXANE	0.0034	R	U	0.00014	0.0034	MG/KG	CCVMissi
	2,2-DICHLOROPROPANE	0.023	U	U	0.00032	0.023	MG/KG	
	2-CHLOROTOLUENE	0.0023	U	U	0.0001	0.0023	MG/KG	
	4-BROMOFLUOROBENZENE	105			3.44	0.00344	ERCEN	
	4-CHLOROTOLUENE	0.0034	U	U	0.00008	0.0034	MG/KG	
	BENZENE	0.0023	U	U	0.0001	0.0023	MG/KG	
	BROMOBENZENE	0.0023	U	U	0.00009	0.0023	MG/KG	
	BROMOCHLOROMETHANE	0.0023	U	U	0.000018	0.0023	MG/KG	
	BROMODICHLOROMETHANE	0.0046	U	U	0.0001	0.0046	MG/KG	
	BROMOFORM	0.0069	U	U	0.00018	0.0069	MG/KG	
	BROMOMETHANE	0.0057	R	U	0.0002	0.0057	MG/KG	CCVMissi
	CARBON TETRACHLORIDE	0.011	U	U	0.00016	0.011	MG/KG	
	CHLOROBENZENE	0.0023	U	U	0.00012	0.0023	MG/KG	
	CHLOROETHANE	0.0057	R	U	0.0003	0.0057	MG/KG	IC%RSI
	CHLOROETHANE	0.0057	R	U	0.0003	0.0057	MG/KG	CCVMissi
	CHLOROFORM	0.0023	U	U	0.00015	0.0023	MG/KG	
	CHLOROMETHANE	0.008	R	U	0.00009	0.008	MG/KG	CCVMissi
	CIS-1,2-DICHLOROETHENE	0.0069	U	U	0.00008	0.0069	MG/KG	
	CIS-1,3-DICHLOROPROPENE	0.0057	U	U	0.00011	0.0057	MG/KG	
	DIBROMOCHLOROMETHANE	0.0034	U	U	0.00016	0.0034	MG/KG	
	DIBROMOFLUOROMETHANE	111			3.44	0.00344	ERCEN	
	DIBROMOMETHANE	0.011	U	U	0.0002	0.011	MG/KG	
	DICHLORODIFLUOROMETHANE	0.0057	R	U	0.00036	0.0057	MG/KG	BS%R
	DICHLORODIFLUOROMETHANE	0.0057	R	U	0.00036	0.0057	MG/KG	CCVMissi
	ETHYLBENZENE	0.0034	U	U	0.00012	0.0034	MG/KG	
	HEXAChLOROBUTADIENE	0.0057	U	U	0.0002	0.0057	MG/KG	
	ISOPROPYLBENZENE	0.0092	U	U	0.00013	0.0092	MG/KG	

6521127

9712023 SW8260A

Page 6 of 8

M,P-XYLENE	0.008	U	U	0 00022	0.008	MG/KG	
METHYLENE CHLORIDE	0 0032	R	U	0.00021	0.0023	MG/KG	BD%R
METHYLENE CHLORIDE	0.0032	R	U	0.00021	0.0023	MG/KG	BS%R
METHYLENE CHLORIDE	0.0032	R	U	0.00021	0.0023	MG/KG	CV%D
METHYLENE CHLORIDE	0.0032	R	U	0.00021	0 0023	MG/KG	IC%RSI
METHYLENE CHLORIDE	0.0032	R	U	0.00021	0.0023	MG/KG	SSCCV%
N-BUTYLBENZENE	0 0057	U	U	0.00011	0.0057	MG/KG	
N-PROPYLBENZENE	0.0023	U	U	0.00009	0 0023	MG/KG	
NAPHTHALENE	0.0023	R	U	0.00012	0 0023	MG/KG	CV%D
O-XYLENE	0 0057	U	U	0.00013	0.0057	MG/KG	
P-ISOPROPYLtolUENE	0.0069	U	U	0.00009	0.0069	MG/KG	
SEC-BUTYLBENZENE	0.008	U	U	0.00012	0.008	MG/KG	
STYRENE	0.0023	U	U	0.00012	0.0023	MG/KG	
TERT-BUTYLBENZENE	0.008	U	U	0.00013	0.008	MG/KG	
TETRACHLOROETHENE	0.008	U	U	0.00017	0.008	MG/KG	
TOLUENE	0.0057	U	U	0.00014	0.0057	MG/KG	
TOLUENE-D8	99			3.44	0.00344	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.0034	U	U	0.00009	0 0034	MG/KG	
TRANS-1,3-DICHLOROPROPENE	0 0057	U	U	0.00017	0 0057	MG/KG	
TRICHLOROETHENE	0.011	U	U	0 0001	0 011	MG/KG	
TRICHLOROFLUOROMETHANE	0.0046	R	U	0.00022	0.0046	MG/KG	CCVMissi
VINYL CHLORIDE	0.01	R	U	0.00016	0.01	MG/KG	CCVMissi

- Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriate flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

6521129

9712023 SW8260A

Page 8 of 8

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

**Data Quality Evaluation****SDG 9712095****Method SW8260A****Reviewer nh****Date 3/9/98****Matrix water and soil**

Senior Review Vito D'Aurora

Field Samples**1-Soil Sample**

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
Soil					
AHA046	N	LABQC	BD		
Water					
AHA044TB1	TB	AHA045EB1	EB	LABQC	BD

**1. Case Narrative
Items of Interest**

- Both the water and soil method blanks had Methylene Chloride detected > the reporting limit. This compound was detected in samples 1and 3 below the calculated value, so the data were flagged U (by the lab).
- All water LCS/LCD recoveries were within acceptance criteria with the exception of Methylene Chloride.
- All soil LCS/LCD recoveries were within acceptance criteria with the exception of Methylene Chloride and Dichlorodifluoromethane. No hits for the latter compound in the samples.
- Several compounds from the iCV/CCV order curve were within the acceptance limit but exceeded the 15% RSD criteria. These were quantitated using the average response factor due to software problem.

2. Blank Summary**Field Blanks All criteria were met.****Method Blanks**

- Both the water and soil method blanks had Methylene Chloride detected > the reporting limit. This compound was detected in the samples below the calculated value, so the data were flagged U (by the lab). No validation necessary.

6521131

9712095 SW8260A

Page 2 of 8

<u>Blank Type</u>	<u>Blank ID</u>	<u>Analyte</u>	<u>Result</u>	<u>ReportLimit</u>	<u>LabFlag</u>	<u>Units</u>
LB	LABQC	METHYLENE CHLORIDE	0.0025	0.00021		MG/KG
LB	LABQC	METHYLENE CHLORIDE	0.4	0.21		UG/L

3. Spikes and Duplicates

Field Duplicates None

Laboratory Duplicates None

Matrix Spike None

4. Laboratory Control Sample

1. All water LCS/LCD recoveries were within acceptance criteria with the exception of Methylene Chloride. Field blanks not flagged.
2. All soil LCS/LCD recoveries were within acceptance criteria with the exception of Methylene Chloride in the LCS/LCD and Dichlorodifluoromethane in the LCS. The sample was flagged R for non-detects.

<u>Matrix</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>Analyte</u>	<u>Recovery</u>	<u>LowerLimit</u>	<u>UpperLimit</u>
WATER	BS	LABQC	METHYLENE CHLORIDE	62	75	125
WATER	BD	LABQC	METHYLENE CHLORIDE	64	75	—
SOIL	BS	LABQC	DICHLORODIFLUOROMETHANE	52	65	135
SOIL	BS	LABQC	METHYLENE CHLORIDE	58	65	135
SOIL	BD	LABQC	METHYLENE CHLORIDE	57	65	135

5. Surrogates

All surrogate recoveries were within acceptance criteria.

6. Tuning and Mass Calibration

All criteria met.

7. Internal Standard

All internal standard recoveries were within acceptance criteria.

8. Calibration Information

Initial Calibration

1. Methylene Chloride, Naphthalene and 1,2,3-Trichlorobenzene from the 12/11/97 water ICAL order curve exceeded the % RSD criteria. The field blanks were not validated.
2. Chloroethane and Methylene Chloride from the 12/10/97 soil ICAL order curve

exceeded criteria. The applicable sample was flagged R.

<u>Field ID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation Reason</u>
AHA046	CHLOROETHANE	R	IC%RSD
AHA046	METHYLENE CHLORIDE	R	IC%RSD

Continuing Calibration

1. Seven compounds were missing from the 12/11/97 water 2nd source CCV and two compounds fell outside the expected value. The field blanks were not validated.
2. Methylene Chloride and Naphthalene fell outside the expected value in the 12/11/97 soil CCV and the sample was marked R.
3. Seven compounds were missing from the 12/09/97 soil 2nd source CCV. These were flagged R in the sample.
4. 1,1-Dichloroethene and Methylene Chloride in the soil CCV 12/09/97 exceeded the expected value and the sample was flagged R.

<u>Field ID</u>	<u>LabsampleID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation</u>
AHA046	9712095-3	1-CHLOROHEXANE	R	CCVMiss
AHA046	9712095-3	BROMOMETHANE	R	CCVMiss
-AHA046	9712095-3	CHLOROETHANE	R	CCVMiss
AHA046	9712095-3	CHLOROMETHANE	R	CCVMiss
AHA046	9712095-3	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA046	9712095-3	METHYLENE CHLORIDE	R	CV%D
AHA046	9712095-3	NAPHTHALENE	R	CV%D
AHA046	9712095-3	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA046	9712095-3	VINYL CHLORIDE	R	CCVMiss

9. Holding Time

Holding times were met.

10. Summary

- General Comments**
1. All soil LCS/LCD recoveries were within acceptance criteria with the exception of Methylene Chloride in the LCS/LCD and Dichlorodifluoromethane in the LCS. The sample was flagged R for non-detects.
 2. Chloroethane and Methylene Chloride from the 12/10/97 soil ICAL order curve exceeded criteria. The applicable sample was flagged R.
 3. Methylene Chloride and Naphthalene fell outside the expected value in the 12/11/97 soil CCV and the sample was marked R.
 4. Seven compounds were missing from the 12/09/97 soil 2nd source CCV. These were flagged R in the sample.
 5. 1,1-Dichloroethene and Methylene Chloride in the soil CCV 12/09/97 exceeded the expected value and the sample was flagged R.

Data Package Completeness The water second source ICV was missing from the package. It shared the same one (12/11/97) with package 9712023.

6521133

9712095 SW8260A

Page 4 of 8

**Forms Review/ Items of
Interest** Nothing of interest.

COC Review Complete

6521134

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA046	1,1,1,2-TETRACHLOROETHANE	0.0033	U	U	0.00015	0.0033	MG/KG	SSCCV%
	1,1,1-TRICHLOROETHANE	0.0044	U	U	0.00013	0.0044	MG/KG	
	1,1,2,2-TETRACHLOROETHANE	0.0022	U	U	0.00017	0.0022	MG/KG	
	1,1,2-TRICHLOROETHANE	0.0055	U	U	0.00016	0.0055	MG/KG	
	1,1-DICHLOROETHANE	0.0022	U	U	0.00011	0.0022	MG/KG	
	1,1-DICHLOROETHENE	0.0066	R	U	0.00015	0.0066	MG/KG	
	1,1-DICHLOROPROPENE	0.0055	U	U	0.00014	0.0055	MG/KG	
	1,2,3-TRICHLOROBENZENE	0.0022	U	U	0.00015	0.0022	MG/KG	
	1,2,3-TRICHLOROPROPANE	0.022	U	U	0.00015	0.022	MG/KG	
	1,2,4-TRICHLOROBENZENE	0.0022	U	U	0.00013	0.0022	MG/KG	
	1,2,4-TRIMETHYLBENZENE	0.0078	U	U	0.00009	0.0078	MG/KG	
	2-DIBROMO-3-CHLOROPROPANE	0.011	U	U	0.00025	0.011	MG/KG	
	1,2-DIBROMOETHANE	0.0033	U	U	0.00019	0.0033	MG/KG	
	1,2-DICHLOROBENZENE	0.0022	U	U	0.0001	0.0022	MG/KG	
	1,2-DICHLOROETHANE	0.0033	U	U	0.00033	0.0033	MG/KG	
	1,2-DICHLOROPROPANE	0.0022	U	U	0.00009	0.0022	MG/KG	
	1,3,5-TRIMETHYLBENZENE	0.0033	U	U	0.0001	0.0033	MG/KG	
	1,3-DICHLOROBENZENE	0.0066	U	U	0.00005	0.0066	MG/KG	
	1,3-DICHLOROPROPANE	0.0022	U	U	0.00015	0.0022	MG/KG	
	1,4-DICHLOROBENZENE	0.0022	U	U	0.00012	0.0022	MG/KG	
	1-CHLOROHEXANE	0.0033	R	U	0.00014	0.0033	MG/KG	CCVMissi
	2,2-DICHLOROPROPANE	0.022	U	U	0.00032	0.022	MG/KG	
	2-CHLOROTOLUENE	0.0022	U	U	0.0001	0.0022	MG/KG	
	4-BROMOFLUOROBENZENE	109			3.32	0.00332	ERCEN	
	4-CHLOROTOLUENE	0.0033	U	U	0.00008	0.0033	MG/KG	CCVMissi
	BENZENE	0.0022	U	U	0.0001	0.0022	MG/KG	
	BROMOBENZENE	0.0022	U	U	0.00009	0.0022	MG/KG	
	BROMOCHLOROMETHANE	0.0022	U	U	0.00018	0.0022	MG/KG	
	BROMODICHLOROMETHANE	0.0044	U	U	0.0001	0.0044	MG/KG	
	BROMOFORM	0.0066	U	U	0.00018	0.0066	MG/KG	
	BROMOMETHANE	0.0055	R	U	0.0002	0.0055	MG/KG	
	CARBON TETRACHLORIDE	0.011	U	U	0.00016	0.011	MG/KG	
	CHLOROBENZENE	0.0022	U	U	0.00012	0.0022	MG/KG	
	CHLOROETHANE	0.0055	R	U	0.0003	0.0055	MG/KG	CCVMissi
	CHLOROETHANE	0.0055	R	U	0.0003	0.0055	MG/KG	
	CHLOROFORM	0.0022	U	U	0.00015	0.0022	MG/KG	
	CHLOROMETHANE	0.0078	R	U	0.00009	0.0078	MG/KG	
	CIS-1,2-DICHLOROETHENE	0.0066	U	U	0.00008	0.0066	MG/KG	CCVMissi
	CIS-1,3-DICHLOROPROPENE	0.0055	U	U	0.00011	0.0055	MG/KG	
	DIBROMOCHLOROMETHANE	0.0033	U	U	0.00016	0.0033	MG/KG	
	DIBROMOFLUOROMETHANE	107			3.32	0.00332	ERCEN	
	DIBROMOMETHANE	0.011	U	U	0.0002	0.011	MG/KG	CCVMissi
	DICHLORODIFLUOROMETHANE	0.0055	R	U	0.00036	0.0055	MG/KG	
	DICHLORODIFLUOROMETHANE	0.0055	R	U	0.00036	0.0055	MG/KG	
	ETHYLBENZENE	0.0033	U	U	0.00012	0.0033	MG/KG	
	HEXAChLOROBUTADIENE	0.0055	U	U	0.0002	0.0055	MG/KG	BS%R
	ISOPROPYLBENZENE	0.0089	U	U	0.00013	0.0089	MG/KG	

6521135

9712095 SW8260A

Page 6 of 8

M,P-XYLENE	0.0023	F	F	0.00022	0.0078	MG/KG	
METHYLENE CHLORIDE	0.0039	R	U	0.00021	0.0022	MG/KG	BD%R
METHYLENE CHLORIDE	0.0039	R	U	0.00021	0.0022	MG/KG	BS%R
METHYLENE CHLORIDE	0.0039	R	U	0.00021	0.0022	MG/KG	CV%D
METHYLENE CHLORIDE	0.0039	R	U	0.00021	0.0022	MG/KG	IC%RSI
METHYLENE CHLORIDE	0.0039	R	U	0.00021	0.0022	MG/KG	SSCCV%
N-BUTYLBENZENE	0.0055	U	U	0.00011	0.0055	MG/KG	
N-PROPYLBENZENE	0.0022	U	U	0.00009	0.0022	MG/KG	
NAPHTHALENE	0.0022	R	U	0.00012	0.0022	MG/KG	CV%D
O-XYLENE	0.0055	U	U	0.00013	0.0055	MG/KG	
P-ISOPROPYLTOLUENE	0.0066	U	U	0.00009	0.0066	MG/KG	
SEC-BUTYLBENZENE	0.0078	U	U	0.00012	0.0078	MG/KG	
STYRENE	0.0022	U	U	0.00012	0.0022	MG/KG	
TERT-BUTYLBENZENE	0.0078	U	U	0.00013	0.0078	MG/KG	
TETRACHLOROETHENE	0.0078	U	U	0.00017	0.0078	MG/KG	
TOLUENE	0.0055	U	U	0.00014	0.0055	MG/KG	
TOLUENE-D8	101			3.32	0.00332	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.0033	U	U	0.00009	0.0033	MG/KG	
TRANS-1,3-DICHLOROPROPENE	0.0055	U	U	0.00017	0.0055	MG/KG	
TRICHLOROETHENE	0.011	U	U	0.0001	0.011	MG/KG	
TRICHLOROFLUOROMETHANE	0.0044	R	U	0.00022	0.0044	MG/KG	CCVMissi
VINYL CHLORIDE	0.01	R	U	0.00016	0.01	MG/KG	CCVMissi

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceeded
NOLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

6521137

9712095 SW8260A

Page 8 of 8

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within critena

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

NAS FW JRB AOC 2

6521138



Data Quality Evaluation

CH2MHILL**SDG 9712123****Method SW8260A****Reviewer nh****Date 3/25/98****Matrix water and soil**

Senior Review Vito D'Aurora

Field Samples

Hits on nearly all soil samples for Methylene Chloride.

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
Soil					
AHA049	N	AHA050	N	AHA051	N
AHA052	N	AHA053	N	AHA054	N
LABQC	BD				

Water

AHA047TB1	TB	AHA048EB1	EB
-----------	----	-----------	----

1. Case Narrative**Items of Interest**

1. There were no target analytes detected in the soil method blank.
2. The water method blank had Methylene Chloride and Chloroform detected > the reporting limit. Methylene Chloride was detected in samples 1 and 2 < the calculated value, so the data were flagged U (by the lab).
3. All soil LCS/LCD recoveries were within acceptance criteria with the exception of Dichlorofluoromethane and Methylene Chloride in the LCS/LCD. No hits detected in the soil samples except for Methylene Chloride.
4. All water LCS/LCD recoveries were within acceptance criteria with the exception of Bromomethane and Methylene Chloride in the LCS/LCD. Methylene Chloride was detected in the water samples. 1,2-Dibromo-3-chloropropane did not recover.
5. Dichlorofluoromethanes low recovery frequently occurs due to a loss of this highly volatile compound in the spiking standard.
6. Several compounds from the ICV/CCV order curve were within the acceptance limit but exceeded the 15% RSD criteria. These were quantitated using the average response factor due to software problem.

2. Blank Summary

Field Blanks All criteria were met.

6521139

9712123 SW8260A

Page 2 of 14

- Method Blanks**
1. There were no target analytes detected in the soil method blank.
 2. The water method blank had Methylene Chloride and Chloroform detected > the reporting limit. Methylene Chloride was detected in samples 1 and 2 < the calculated value, so the data were flagged U (by the lab). No validation necessary.

3. Spikes and Duplicates

Field Duplicates None

Laboratory Duplicates None

Matrix Spike None

4. Laboratory Control Sample

1. All soil LCS/LCD recoveries were within acceptance criteria with the exception of Dichlorofluoromethane and Methylene Chloride in the LCS/LCD. No hits detected in the soil samples except for Methylene Chloride. All detects were validated with a J flag and non-detects were validated with a R flag.
2. All water LCS/LCD recoveries were within acceptance criteria with the exception of Methylene Chloride in the LCS/LCD. Bromomethane, Dichlorodifluoromethane and Trichlorofluoromethane recovered low in the LCS only, whereas Chloromethane recovered high in the LCD. 1,2-Dibromo-3-chloropropane did not recover in either LCS/LCD. Methylene Chloride was detected in the water samples. No action was required due to field blanks as the only water samples.

<u>Matrix</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>Analyte</u>	<u>Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
SOIL	BS	LABQC	DICHLORODIFLUOROMET	40	65	135
SOIL	BS	LABQC	METHYLENE CHLORIDE	55	65	135
SOIL	BD	LABQC	DICHLORODIFLUOROMET	42	65	135
SOIL	BD	LABQC	METHYLENE CHLORIDE	53	-65	135

5. Surrogates

All surrogate recoveries were within acceptance criteria.

6. Tuning and Mass Calibration

All criteria met.

7. Internal Standard

All internal standard recoveries were within acceptance criteria.

8. Calibration Information**Initial Calibration**

1. Methylene Chloride, Bromochloromethane, 1,2-Dibromo-3-chlorobenzene and 1,2,4-Trichlorobenzene from the 12/15/97 water ICAL order curve exceeded the % RSD criteria. The field blanks were not validated.
2. Chloroethane and Methylene Chloride did not meet the % RSD criteria on the ICAL from 12/10/97. The applicable soil samples were marked R.

<u>Field ID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation Reason</u>
AHA049	CHLOROETHANE	R	IC%RSD
AHA050	CHLOROETHANE	R	IC%RSD
AHA051	CHLOROETHANE	R	IC%RSD
AHA052	CHLOROETHANE	R	IC%RSD
AHA053	CHLOROETHANE	R	IC%RSD
AHA054	CHLOROETHANE	R	IC%RSD
AHA049	METHYLENE CHLORIDE	R	IC%RSD
AHA050	METHYLENE CHLORIDE	R	IC%RSD
AHA051	METHYLENE CHLORIDE	R	IC%RSD
AHA052	METHYLENE CHLORIDE	R	IC%RSD
AHA053	METHYLENE CHLORIDE	R	IC%RSD
AHA054	METHYLENE CHLORIDE	R	IC%RSD

Continuing Calibration

1. Seven compounds were missing from the 12/09/97 Water 2nd source Cal, and two compounds fell outside the expected value. The field blanks were not validated.
2. Methylene Chloride from the 12/15/97 CCV did not meet criteria. Not validated.
3. Methylene Chloride, Isopropylbenzene and n-Propylbenzene all exceeded the %RSD criteria from the 12/17/97 CCV order. The applicable soil samples were marked R.

<u>Field ID</u>	<u>LabsampleID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation</u>
AHA049	9712123-3	ISOPROPYLBENZENE	R	CV%D
AHA049	9712123-3	METHYLENE CHLORIDE	R	CV%D
AHA049	9712123-3	N-PROPYLBENZENE	R	CV%D
AHA050	9712123-4	ISOPROPYLBENZENE	R	CV%D
AHA050	9712123-4	METHYLENE CHLORIDE	R	CV%D
AHA050	9712123-4	N-PROPYLBENZENE	R	CV%D
AHA051	9712123-5	ISOPROPYLBENZENE	R	CV%D
AHA051	9712123-5	METHYLENE CHLORIDE	R	CV%D
AHA051	9712123-5	N-PROPYLBENZENE	R	CV%D
AHA052	9712123-6	ISOPROPYLBENZENE	R	CV%D
AHA052	9712123-6	METHYLENE CHLORIDE	R	CV%D
AHA052	9712123-6	N-PROPYLBENZENE	R	CV%D

6521141

9712123 SW8260A

Page 4 of 14

AHA053	9712123-7	ISOPROPYLBENZENE	R	CV%D
AHA053	9712123-7	METHYLENE CHLORIDE	R	CV%D
AHA053	9712123-7	N-PROPYLBENZENE	R	CV%D
AHA054	9712123-8	ISOPROPYLBENZENE	R	CV%D
AHA054	9712123-8	METHYLENE CHLORIDE	R	CV%D
AHA054	9712123-8	N-PROPYLBENZENE	R	CV%D

9. Holding Time

Holding times were met.

10. Summary

General Comments

1. All soil LCS/LCD recoveries were within acceptance criteria with the exception of Dichlorofluoromethane and Methylene Chloride in the LCS/LCD. No hits detected in the soil samples except for Methylene Chloride. All detects were validated with a J flag and non-detects were validated with a R flag.
2. Chloroethane and Methylene Chloride did not meet the % RSD criteria on the ICAL from 12/10/97. The applicable soil samples were marked R.
3. Methylene Chloride, Isopropylbenzene and n-Propylbenzene all exceeded the %RSD criteria from the 12/17/97 CCV order. The applicable soil samples were marked R.

Data Package Completeness

1. The 2nd source cal. was not included in the package for soil. The CCV was used as verification.
2. The water blank and LCS/LCD were not included in the EDD file.

Forms Review/ Items of Interest

Nothing of interest.

COC Review

Complete

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab -Flag	MDL	RL	Units	Validation Reason
AHA049	1,1,1,2-TETRACHLOROETHANE	0.003	U	U	0.00015	0.003	MG/KG	
	1,1,1-TRICHLOROETHANE	0.004	U	U	0.00013	0.004	MG/KG	
	1,1,2,2-TETRACHLOROETHANE	0.002	U	U	0.00017	0.002	MG/KG	
	1,1,2-TRICHLOROETHANE	0.005	U	U	0.00016	0.005	MG/KG	
	1,1-DICHLOROETHANE	0.002	U	U	0.00011	0.002	MG/KG	
	1,1-DICHLOROETHENE	0.006	-U	U	0.00015	0.006	MG/KG	
	1,1-DICHLOROPROPENE	0.005	U	U	0.00014	0.005	MG/KG	
	1,2,3-TRICHLOROBENZENE	0.002	U	U	0.00015	0.002	MG/KG	
	1,2,3-TRICHLOROPROPANE	0.02	U	U	0.00015	0.02	MG/KG	
	1,2,4-TRICHLOROBENZENE	0.002	U	U	0.00013	0.002	MG/KG	
	1,2,4-TRIMETHYLBENZENE	0.007	U	U	0.00009	0.007	MG/KG	
	2-DIBROMO-3-CHLOROPROPANE	0.01	U	U	0.00025	0.01	MG/KG	
	1,2-DIBROMOETHANE	0.003	U	U	0.00019	0.003	MG/KG	
	1,2-DICHLOROBENZENE	0.002	U	U	0.0001	0.002	MG/KG	
	1,2-DICHLOROETHANE	0.003	U	U	0.00033	0.003	MG/KG	
	1,2-DICHLOROPROPANE	0.002	U	U	0.00009	0.002	MG/KG	
	1,3,5-TRIMETHYLBENZENE	0.003	U	U	0.0001	0.003	MG/KG	
	1,3-DICHLOROBENZENE	0.006	U	U	0.00005	0.006	MG/KG	
	1,3-DICHLOROPROPANE	0.002	U	U	0.00015	0.002	MG/KG	
	1,4-DICHLOROBENZENE	0.002	U	U	0.00012	0.002	MG/KG	
	1-CHLOROHEXANE	0.003	U	U	0.00014	0.003	MG/KG	
	2,2-DICHLOROPROPANE	0.02	U	U	0.00032	0.02	MG/KG	
	2-CHLOROTOLUENE	0.002	U	U	0.0001	0.002	MG/KG	
	4-BROMOFLUOROBENZENE	105	-	-	0.003	0.003	ERCEN	
	4-CHLOROTOLUENE	0.003	U	U	0.00008	0.003	MG/KG	
	BENZENE	0.002	U	U	0.0001	0.002	MG/KG	
	BROMOBENZENE	0.002	U	U	0.00009	0.002	MG/KG	
	BROMOCHLOROMETHANE	0.002	U	U	0.00018	0.002	MG/KG	
	BROMODICHLOROMETHANE	0.004	U	U	0.0001	0.004	MG/KG	
	BROMOFORM	0.006	U	U	0.00018	0.006	MG/KG	
	BROMOMETHANE	0.005	U	U	0.0002	0.005	MG/KG	
	CARBON TETRACHLORIDE	0.01	U	U	0.00016	0.01	MG/KG	
	CHLOROBENZENE	0.002	U	U	0.00012	0.002	MG/KG	
	CHLOROETHANE	0.005	R	U	0.0003	0.005	MG/KG	IC%RSI
	CHLOROFORM	0.002	U	U	0.00015	0.002	MG/KG	
	CHLOROMETHANE	0.007	U	U	0.00009	0.007	MG/KG	
	CIS-1,2-DICHLOROETHENE	0.006	U	U	0.00008	0.006	MG/KG	
	CIS-1,3-DICHLOROPROPENE	0.005	U	U	0.00011	0.005	MG/KG	
	DIBROMOCHLOROMETHANE	0.003	U	U	0.00016	0.003	MG/KG	
	DIBROMOFLUOROMETHANE	102	-	-	0.003	0.003	ERCEN	
	DIBROMOMETHANE	0.01	U	U	0.0002	0.01	MG/KG	
	DICHLORODIFLUOROMETHANE	0.005	R	U	0.00036	0.005	MG/KG	BS%R
	DICHLORODIFLUOROMETHANE	0.005	R	U	0.00036	0.005	MG/KG	BD%R
	ETHYLBENZENE	0.003	U	U	0.00012	0.003	MG/KG	
	HEXACHLOROBUTADIENE	0.005	U	U	0.0002	0.005	MG/KG	
	ISOPROPYLBENZENE	0.008	R	U	0.00013	0.008	MG/KG	CV%D
	M,P-XYLENE	0.007	U	U	0.00022	0.007	MG/KG	

6521143

9712123 SW8260A

Page 6 of 14

	METHYLENE CHLORIDE	0.0026	R		0.00021	0.002	MG/KG	CV%D
	METHYLENE CHLORIDE	0.0026	R		0.00021	0.002	MG/KG	IC%RSI
	N-BUTYLBENZENE	0.005	U	U	0.00011	0.005	MG/KG	
	N-PROPYLBENZENE	0.002	R	U	0.00009	0.002	MG/KG	CV%D
	NAPHTHALENE	0.002	U	U	0.00012	0.002	MG/KG	
	O-XYLENE	0.005	U	U	0.00013	0.005	MG/KG	
	P-ISOPROPYLtolUENE	0.006	U	U	0.00009	0.006	MG/KG	
	SEC-BUTYLBENZENE	0.007	U	U	0.00012	0.007	MG/KG	
	STYRENE	0.002	U	U	0.00012	0.002	MG/KG	
	TERT-BUTYLBENZENE	0.007	U	U	0.00013	0.007	MG/KG	
	TETRACHLOROETHENE	0.007	U	U	0.00017	0.007	MG/KG	
	TOLUENE	0.005	U	U	0.00014	0.005	MG/KG	
	TOLUENE-D8	102			0.003	0.003	ERCEN	
	TRANS-1,2-DICHLOROETHENE	0.003	U	U	0.00009	0.003	MG/KG	
	TRANS-1,3-DICHLOROPROPENE	0.005	U	U	0.00017	0.005	MG/KG	
	TRICHLOROETHENE	0.01	U	U	0.0001	0.01	MG/KG	
	TRICHLOROFLUOROMETHANE	0.004	U	U	0.00022	0.004	MG/KG	
	VINYL CHLORIDE	0.009	U	U	0.00016	0.009	MG/KG	

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA050	1,1,1,2-TETRACHLOROETHANE	0.003	U	U	0.00015	0.003	MG/KG	
	1,1,1-TRICHLOROETHANE	0.004	U	U	0.00013	0.004	MG/KG	
	1,1,2,2-TETRACHLOROETHANE	0.002	U	U	0.00017	0.002	MG/KG	
	1,1,2-TRICHLOROETHANE	0.005	U	U	0.00016	0.005	MG/KG	
-	1,1-DICHLOROETHANE	0.002	U	U	0.00011	0.002	MG/KG	
-	1,1-DICHLOROETHENE	0.006	U	U	0.00015	0.006	MG/KG	
-	1,1-DICHLOROPROPENE	0.005	U	U	0.00014	0.005	MG/KG	
-	1,2,3-TRICHLOROBENZENE	0.002	U	U	0.00015	0.002	MG/KG	
-	1,2,3-TRICHLOROPROPANE	0.02	U	U	0.00015	0.02	MG/KG	
-	1,2,4-TRICHLOROBENZENE	0.002	U	U	0.00013	0.002	MG/KG	
-	1,2,4-TRIMETHYLBENZENE	0.007	U	U	0.00009	0.007	MG/KG	
	2-DIBROMO-3-CHLOROPROPANE	0.01	U	U	0.00025	0.01	MG/KG	
	1,2-DIBROMOETHANE	0.003	U	U	0.00019	0.003	MG/KG	
	1,2-DICHLOROBENZENE	0.002	U	U	0.0001	0.002	MG/KG	
	1,2-DICHLOROETHANE	0.003	U	U	0.00033	0.003	MG/KG	
	1,2-DICHLOROPROPANE	0.002	U	U	0.00009	0.002	MG/KG	
	1,3,5-TRIMETHYLBENZENE	0.003	U	U	0.0001	0.003	MG/KG	
	1,3-DICHLOROBENZENE	0.006	U	U	0.00005	0.006	MG/KG	
	1,3-DICHLOROPROPANE	0.002	U	U	0.00015	0.002	MG/KG	
	1,4-DICHLOROBENZENE	0.002	U	U	0.00012	0.002	MG/KG	
	1-CHLOROHEXANE	0.003	U	U	0.00014	0.003	MG/KG	
	2,2-DICHLOROPROPANE	0.02	U	U	0.00032	0.02	MG/KG	
	2-CHLOROTOLUENE	0.002	U	U	0.0001	0.002	MG/KG	
	4-BROMOFLUOROBENZENE	114			0.003	0.003	ERCEN	
	4-CHLOROTOLUENE	0.003	U	U	0.00008	0.003	MG/KG	
	BENZENE	0.002	U	U	0.0001	0.002	MG/KG	
	BROMOBENZENE	0.002	U	U	0.00009	0.002	MG/KG	
	BROMOCHLOROMETHANE	0.002	U	U	0.00018	0.002	MG/KG	
	BROMODICHLOROMETHANE	0.004	U	U	0.0001	0.004	MG/KG	
	BROMOFORM	0.006	U	U	0.00018	0.006	MG/KG	
	BROMOMETHANE	0.005	U	U	0.0002	0.005	MG/KG	
	CARBON TETRACHLORIDE	0.01	U	U	0.00016	0.01	MG/KG	
	CHLOROBENZENE	0.002	U	U	0.00012	0.002	MG/KG	
	CHLOROETHANE	0.005	R	U	0.0003	0.005	MG/KG	IC%RSI
	CHLOROFORM	0.002	U	U	0.00015	0.002	MG/KG	

FILE #
6521144

CHLOROMETHANE	0.007	U	U	0.00009	0.007	MG/KG
CIS-1,2-DICHLOROETHENE	0.006	U	U	0.00008	0.006	MG/KG
CIS-1,3-DICHLOROPROPENE	0.005	U	U	0.00011	0.005	MG/KG
DIBROMOCHLOROMETHANE	0.003	U	U	0.00016	0.003	MG/KG
DIBROMOFLUOROMETHANE	103			0.003	0.003	ERCEN
DIBROMOMETHANE	0.01	U	U	0.0002	0.01	MG/KG
DICHLORODIFLUOROMETHANE	0.005	R	U	0.00036	0.005	MG/KG
DICHLORODIFLUOROMETHANE	0.005	R	U	0.00036	0.005	MG/KG
ETHYLBENZENE	0.003	U	U	0.00012	0.003	MG/KG
HEXACHLOROBUTADIENE	0.005	U	U	0.0002	0.005	MG/KG
ISOPROPYLBENZENE	0.008	R	U	0.00013	0.008	MG/KG
M,P-XYLENE	0.007	U	U	0.00022	0.007	MG/KG
METHYLENE CHLORIDE	0.0028	R		0.00021	0.002	MG/KG
METHYLENE CHLORIDE	0.0028	R		0.00021	0.002	MG/KG
N-BUTYLBENZENE	0.005	U	U	0.00011	0.005	MG/KG
N-PROPYLBENZENE	0.002	R	U	0.00009	0.002	MG/KG
NAPHTHALENE	0.002	U	U	0.00012	0.002	MG/KG
O-XYLENE	0.005	U	U	0.00013	0.005	MG/KG
P-ISOPROPYLTOLUENE	0.006	U	U	0.00009	0.006	MG/KG
SEC-BUTYLBENZENE	0.007	U	U	0.00012	0.007	MG/KG
STYRENE	0.002	U	U	0.00012	0.002	MG/KG
TERT-BUTYLBENZENE	0.007	U	U	0.00013	0.007	MG/KG
TETRACHLOROETHENE	0.007	U	U	0.00017	0.007	MG/KG
TOLUENE	0.005	U	U	0.00014	0.005	MG/KG
TOLUENE-D8	95			0.003	0.003	ERCEN
TRANS-1,2-DICHLOROETHENE	0.003	U	U	0.00009	0.003	MG/KG
TRANS-1,3-DICHLOROPROPENE	0.005	U	U	0.00017	0.005	MG/KG
TRICHLOROETHENE	0.01	U	U	0.0001	0.01	MG/KG
TRICHLOROFLUOROMETHANE	0.004	U	U	0.00022	0.004	MG/KG
VINYL CHLORIDE	0.009	U	U	0.00016	0.009	MG/KG

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA051	1,1,1,2-TETRACHLOROETHANE	0.003	U	U	0.00015	0.003	MG/KG	
	1,1,1-TRICHLOROETHANE	0.004	U	U	0.00013	0.004	MG/KG	
	1,1,2,2-TETRACHLOROETHANE	0.002	U	U	0.00017	0.002	MG/KG	
	1,1,2-TRICHLOROETHANE	0.005	U	U	0.00016	0.005	MG/KG	
	1,1-DICHLOROETHANE	0.002	U	U	0.00011	0.002	MG/KG	
	1,1-DICHLOROETHENE	0.006	U	U	0.00015	0.006	MG/KG	
	1,1-DICHLOROPROPENE	0.005	U	U	0.00014	0.005	MG/KG	
	1,2,3-TRICHLOROBENZENE	0.002	U	U	0.00015	0.002	MG/KG	
	1,2,3-TRICHLOROPROPANE	0.02	U	U	0.00015	0.02	MG/KG	
	1,2,4-TRICHLOROBENZENE	0.002	U	U	0.00013	0.002	MG/KG	
	1,2,4-TRIMETHYLBENZENE	0.007	U	U	0.00009	0.007	MG/KG	
	2-DIBROMO-3-CHLOROPROPANE	0.01	U	U	0.00025	0.01	MG/KG	
	1,2-DIBROMOETHANE	0.003	U	U	0.00019	0.003	MG/KG	
	1,2-DICHLOROBENZENE	0.002	U	U	0.0001	0.002	MG/KG	
	1,2-DICHLOROETHANE	0.003	U	U	0.00033	0.003	MG/KG	
	1,2-DICHLOROPROPANE	0.002	U	U	0.00009	0.002	MG/KG	
	1,3,5-TRIMETHYLBENZENE	0.003	U	U	0.0001	0.003	MG/KG	
	1,3-DICHLOROBENZENE	0.006	U	U	0.00005	0.006	MG/KG	
	1,3-DICHLOROPROPANE	0.002	U	U	0.00015	0.002	MG/KG	
	1,4-DICHLOROBENZENE	0.002	U	U	0.00012	0.002	MG/KG	
	1-CHLOROHEXANE	0.003	U	U	0.00014	0.003	MG/KG	
	2,2-DICHLOROPROPANE	0.02	U	U	0.00032	0.02	MG/KG	
	2-CHLOROTOLUENE	0.002	U	U	0.0001	0.002	MG/KG	

6521145

9712123 SW8260A

Page 8 of 14

4-BROMOFLUOROBENZENE	107			0.003	0.003	ERCEN	
4-CHLOROTOLUENE	0.003	U	U	0.00008	0.003	MG/KG	
BENZENE	0.002	U	U	0.0001	0.002	MG/KG	
BROMOBENZENE	0.002	U	U	0.00009	0.002	MG/KG	
BROMOCHLOROMETHANE	0.002	U	U	0.00018	0.002	MG/KG	
BROMODICHLOROMETHANE	0.004	U	U	0.0001	0.004	MG/KG	
BROMOFORM	0.006	U	U	0.00018	0.006	MG/KG	
BROMOMETHANE	0.005	U	U	0.0002	0.005	MG/KG	
CARBON TETRACHLORIDE	0.01	U	U	0.00016	0.01	MG/KG	
CHLOROBENZENE	0.002	U	U	0.00012	0.002	MG/KG	
CHLOROETHANE	0.005	R	U	0.0003	0.005	MG/KG	IC%RSI
CHLOROFORM	0.002	U	U	0.00015	0.002	MG/KG	
CHLOROMETHANE	0.007	U	U	0.00009	0.007	MG/KG	
CIS-1,2-DICHLOROETHENE	0.006	U	U	0.00008	0.006	MG/KG	
CIS-1,3-DICHLOROPROPENE	0.005	U	U	0.00011	0.005	MG/KG	
DIBROMOCHLOROMETHANE	0.003	U	U	0.00016	0.003	MG/KG	
DIBROMOFLUOROMETHANE	103			0.003	0.003	ERCEN	
DIBROMOMETHANE	0.01	U	U	0.0002	0.01	MG/KG	
DICHLORODIFLUOROMETHANI	0.005	R	U	0.00036	0.005	MG/KG	BD%R
DICHLORODIFLUOROMETHANI	0.005	R	U	0.00036	0.005	MG/KG	BS%R
ETHYLBENZENE	0.003	U	U	0.00012	0.003	MG/KG	
HEXACHLOROBUTADIENE	0.005	U	U	0.0002	0.005	MG/KG	
ISOPROPYLBENZENE	0.008	R	U	0.00013	0.008	MG/KG	CV%D
M,P-XYLENE	0.007	U	U	0.00022	0.007	MG/KG	
METHYLENE CHLORIDE	0.0022	R		0.00021	0.002	MG/KG	CV%D
METHYLENE CHLORIDE	0.0022	R		0.00021	0.002	MG/KG	IC%RSI
N-BUTYLBENZENE	0.005	U	U	0.00011	0.005	MG/KG	
N-PROPYLBENZENE	0.002	R	U	0.00009	0.002	MG/KG	CV%D
NAPHTHALENE	0.002	U	U	0.00012	0.002	MG/KG	
O-XYLENE	0.005	U	U	0.00013	0.005	MG/KG	
P-ISOPROPYLtolUENE	0.006	-U	U	0.00009	0.006	MG/KG	
SEC-BUTYLBENZENE	0.007	U	U	0.00012	0.007	MG/KG	
STYRENE	0.002	U	U	0.00012	0.002	MG/KG	
TERT-BUTYLBENZENE	0.007	-U	U	0.00013	0.007	MG/KG	
TETRAChLOROETHENE	0.007	U	U	0.00017	0.007	MG/KG	
TOLUENE	0.005	U	U	0.00014	0.005	MG/KG	
TOLUENE-D8	103			0.003	0.003	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.003	U	U	0.00009	0.003	MG/KG	
TRANS-1,3-DICHLOROPROPENE	0.005	U	U	0.00017	0.005	MG/KG	
TRICHLOROETHENE	0.01	U	U	0.0001	0.01	MG/KG	
TRICHLOROFUOROMETHANE	0.004	U	U	0.00022	0.004	MG/KG	
VINYL CHLORIDE	0.009	U	U	0.00016	0.009	MG/KG	

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA052	1,1,1,2-TETRAChLOROETHANE	0.003	U	U	0.00015	0.003	MG/KG	
	1,1,1-TRICHLOROETHANE	0.004	U	U	0.00013	0.004	MG/KG	
	1,1,2,2-TETRAChLOROETHANE	0.002	U	U	0.00017	0.002	MG/KG	
	1,1,2-TRICHLOROETHANE	0.005	U	U	0.00016	0.005	MG/KG	
	1,1-DICHLOROETHANE	0.002	U	U	0.00011	0.002	MG/KG	
	1,1-DICHLOROETHENE	0.006	U	U	0.00015	0.006	MG/KG	
	1,1-DICHLOROPROPENE	0.005	U	U	0.00014	0.005	MG/KG	
	1,2,3-TRICHLOROBENZENE	0.002	U	U	0.00015	0.002	MG/KG	
	1,2,3-TRICHLOROPROPANE	0.02	U	U	0.00015	0.02	MG/KG	
	1,2,4-TRICHLOROBENZENE	0.002	U	U	0.00013	0.002	MG/KG	
	1,2,4-TRIMETHYLBENZENE	0.007	U	U	0.00009	0.007	MG/KG	

2-DIBROMO-3-CHLOROPROPAN	0.01	U	U	0.00025	0.01	MG/KG
1,2-DIBROMOETHANE	0.003	U	U	0.00019	0.003	MG/KG
1,2-DICHLOROBENZENE	0.002	U	U	0.0001	0.002	MG/KG
1,2-DICHLOROETHANE	0.003	U	U	0.00033	0.003	MG/KG
1,2-DICHLOROPROPANE	0.002	U	U	0.00009	0.002	MG/KG
1,3,5-TRIMETHYLBENZENE	0.003	U	U	0.0001	0.003	MG/KG
1,3-DICHLOROBENZENE	0.006	U	U	0.00005	0.006	MG/KG
1,3-DICHLOROPROPANE	0.002	U	U	0.00015	0.002	MG/KG
1,4-DICHLOROBENZENE	0.002	U	U	0.00012	0.002	MG/KG
1-CHLOROHEXANE	0.003	U	U	0.00014	0.003	MG/KG
2,2-DICHLOROPROPANE	0.02	U	U	0.00032	0.02	MG/KG
2-CHLOROTOLUENE	0.002	U	U	0.0001	0.002	MG/KG
4-BROMOFLUOROBENZENE	117			0.003	0.003	ERCEN
4-CHLOROTOLUENE	0.003	U	U	0.00008	0.003	MG/KG
BENZENE	0.002	U	U	0.0001	0.002	MG/KG
BROMOBENZENE	0.002	U	U	0.00009	0.002	MG/KG
BROMOCHLOROMETHANE	0.002	U	U	0.00018	0.002	MG/KG
BROMODICHLOROMETHANE	0.004	U	U	0.0001	0.004	MG/KG
BROMOFORM	0.006	U	U	0.00018	0.006	MG/KG
BROMOMETHANE	0.005	U	U	0.0002	0.005	MG/KG
CARBON TETRACHLORIDE	0.01	U	U	0.00016	0.01	MG/KG
CHLOROBENZENE	0.002	U	U	0.00012	0.002	MG/KG
CHLOROETHANE	0.005	R	U	0.0003	0.005	MG/KG
CHLOROFORM	0.002	U	U	0.00015	0.002	MG/KG
CHLOROMETHANE	0.007	U	U	0.00009	0.007	MG/KG
CIS-1,2-DICHLOROETHENE	0.006	U	U	0.00008	0.006	MG/KG
CIS-1,3-DICHLOROPROPENE	0.005	U	U	0.00011	0.005	MG/KG
DIBROMOCHLOROMETHANE	0.003	U	U	0.00016	0.003	MG/KG
DIBROMOFLUOROMETHANE	108			0.003	0.003	ERCEN
DIBROMOMETHANE	0.01	U	U	0.0002	0.01	MG/KG
DICHLORODIFLUOROMETHANI	0.005	R	U	0.00036	0.005	MG/KG
DICHLORODIFLUOROMETHANI	0.005	R	U	0.00036	0.005	MG/KG
ETHYLBENZENE	0.003	U	U	0.00012	0.003	MG/KG
HEXAChLOROBUTADIENE	0.005	U	U	0.0002	0.005	MG/KG
ISOPROPYLBENZENE	0.008	R	U	0.00013	0.008	MG/KG
M,P-XYLENE	0.007	U	U	0.00022	0.007	MG/KG
METHYLENE CHLORIDE	0.0023	R		0.00021	0.002	MG/KG
METHYLENE CHLORIDE	0.0023	R		0.00021	0.002	MG/KG
N-BUTYLBENZENE	0.005	U	U	0.00011	0.005	MG/KG
N-PROPYLBENZENE	0.002	R	U	0.00009	0.002	MG/KG
NAPHTHALENE	0.002	U	U	0.00012	0.002	MG/KG
O-XYLENE	0.005	U	U	0.00013	0.005	MG/KG
P-ISOPROPYLtolUENE	0.006	U	U	0.00009	0.006	MG/KG
SEC-BUTYLBENZENE	0.007	U	U	0.00012	0.007	MG/KG
STYRENE	0.002	U	U	0.00012	0.002	MG/KG
TERT-BUTYLBENZENE	0.007	U	U	0.00013	0.007	MG/KG
TETRAChLOROETHENE	0.007	U	U	0.00017	0.007	MG/KG
TOLUENE	0.005	U	U	0.00014	0.005	MG/KG
TOLUENE-D8	95			0.003	0.003	ERCEN
TRANS-1,2-DICHLOROETHENE	0.003	U	U	0.00009	0.003	MG/KG
TRANS-1,3-DICHLOROPROPENI	0.005	U	U	0.00017	0.005	MG/KG
TRICHLOROETHENE	0.01	U	U	0.0001	0.01	MG/KG
TRICHLOROFLUOROMETHANE	0.004	U	U	0.00022	0.004	MG/KG
VINYL CHLORIDE	0.009	U	U	0.00016	0.009	MG/KG

6521147

9712123 SW8260A

Page 10 of 14

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA053	1,1,1,2-TETRACHLOROETHANE	0.003	U	U	0.00015	0.003	MG/KG	IC%RSI
	1,1,1-TRICHLOROETHANE	0.004	U	U	0.00013	0.004	MG/KG	
	1,1,2,2-TETRACHLOROETHANE	0.002	U	U	0.00017	0.002	MG/KG	
	1,1,2-TRICHLOROETHANE	0.005	U	U	0.00016	0.005	MG/KG	
	1,1-DICHLOROETHANE	0.002	U	U	0.00011	0.002	MG/KG	
	1,1-DICHLOROETHENE	0.006	U	U	0.00015	0.006	MG/KG	
	1,1-DICHLOROPROPENE	0.005	U	U	0.00014	0.005	MG/KG	
	1,2,3-TRICHLOROBENZENE	0.002	U	U	0.00015	0.002	MG/KG	
	1,2,3-TRICHLOROPROPANE	0.02	U	U	0.00015	0.02	MG/KG	
	1,2,4-TRICHLOROBENZENE	0.002	U	U	0.00013	0.002	MG/KG	
	1,2,4-TRIMETHYLBENZENE	0.007	U	U	0.00009	0.007	MG/KG	
	2-DIBROMO-3-CHLOROPROPAN	0.01	U	U	0.00025	0.01	MG/KG	
	1,2-DIBROMOETHANE	0.003	U	U	0.00019	0.003	MG/KG	
	1,2-DICHLOROBENZENE	0.002	U	U	0.0001	0.002	MG/KG	
	1,2-DICHLOROETHANE	0.003	U	U	0.00033	0.003	MG/KG	
	1,2-DICHLOROPROPANE	0.002	U	U	0.00009	0.002	MG/KG	
	1,3,5-TRIMETHYLBENZENE	0.003	U	U	0.0001	0.003	MG/KG	
	1,3-DICHLOROBENZENE	0.006	U	U	0.00005	0.006	MG/KG	
	1,3-DICHLOROPROPANE	0.002	U	U	0.00015	0.002	MG/KG	
	1,4-DICHLOROBENZENE	0.002	U	U	0.00012	0.002	MG/KG	
	1-CHLOROHEXANE	0.003	U	U	- 0.00014	0.003	MG/KG	
	2,2-DICHLOROPROPANE	0.02	U	U	0.00032	0.02	MG/KG	
	2-CHLOROTOLUENE	0.002	U	U	0.0001	0.002	MG/KG	
	4-BROMOFLUOROBENZENE	122			0.003	0.003	ERCEN	
	4-CHLOROTOLUENE	0.003	U	U	0.00008	0.003	MG/KG	
	BENZENE	0.002	U	U	0.0001	0.002	MG/KG	
	BROMOBENZENE	0.002	U	U	0.00009	0.002	MG/KG	
	BROMOCHLOROMETHANE	0.002	U	U	0.00018	0.002	MG/KG	
	BROMODICHLOROMETHANE	0.004	U	U	0.0001	0.004	MG/KG	
	BROMOFORM	0.006	U	U	0.00018	0.006	MG/KG	
	BROMOMETHANE	0.005	U	U	0.0002	0.005	MG/KG	
	CARBON TETRACHLORIDE	0.01	U	U	0.00016	0.01	MG/KG	
	CHLOROBENZENE	0.002	U	U	0.00012	0.002	MG/KG	
	CHLOROETHANE	0.005	R	U	0.0003	0.005	MG/KG	
	CHLOROFORM	0.002	U	U	0.00015	0.002	MG/KG	
	CHLOROMETHANE	0.007	U	U	0.00009	0.007	MG/KG	
	CIS-1,2-DICHLOROETHENE	0.006	U	U	0.00008	0.006	MG/KG	
	CIS-1,3-DICHLOROPROPENE	0.005	U	U	0.00011	0.005	MG/KG	
	DIBROMOCHLOROMETHANE	0.003	U	U	0.00016	0.003	MG/KG	
	- DIBROMOFLUOROMETHANE	105			0.003	0.003	ERCEN	
	DIBROMOMETHANE	0.01	U	U	0.0002	0.01	MG/KG	
	DICHLORODIFLUOROMETHANI	0.005	R	U	0.00036	0.005	MG/KG	BD%R
	DICHLORODIFLUOROMETHANI	0.005	R	U	0.00036	0.005	MG/KG	
	ETHYLBENZENE	0.003	U	U	0.00012	0.003	MG/KG	CV%D
	HEXAChLOROBUTADIENE	0.005	U	U	0.0002	0.005	MG/KG	
	ISOPROPYLBENZENE	0.008	R	U	0.00013	0.008	MG/KG	
	M,P-XYLENE	0.007	U	U	0.00022	0.007	MG/KG	
	METHYLENE CHLORIDE	0.002	R		0.00021	0.002	MG/KG	
	METHYLENE CHLORIDE	0.002	R		0.00021	0.002	MG/KG	
	N-BUTYLBENZENE	0.005	U	U	0.00011	0.005	MG/KG	
	N-PROPYLBENZENE	0.002	R	U	0.00009	0.002	MG/KG	
	NAPHTHALENE	0.002	U	U	0.00012	0.002	MG/KG	
	O-XYLENE	0.005	U	U	0.00013	0.005	MG/KG	
	P-ISOPROPYLTOLUENE	0.006	U	U	0.00009	0.006	MG/KG	

11/19/2014

6521148

SEC-BUTYLBENZENE	0.007	U	U	0.00012	0.007	MG/KG
STYRENE	0.002	U	U	0.00012	0.002	MG/KG
TERT-BUTYLBENZENE	0.007	U	U	0.00013	0.007	MG/KG
TETRACHLOROETHENE	0.007	U	U	0.00017	0.007	MG/KG
TOLUENE	0.005	U	U	0.00014	0.005	MG/KG
TOLUENE-D8	92			, 0.003	0.003	ERCEN
TRANS-1,2-DICHLOROETHENE	0.003	U	U	0.00009	0.003	MG/KG
TRANS-1,3-DICHLOROPROPENE	0.005	U	U	0.00017	0.005	MG/KG
TRICHLOROETHENE	0.01	U	U	0.0001	0.01	MG/KG
TRICHLOROFLUOROMETHANE	0.004	U	U	0.00022	0.004	MG/KG
VINYL CHLORIDE	0.009	U	U	0.00016	0.009	MG/KG

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA054	1,1,1,2-TETRACHLOROETHANE	0.003	U	U	0.00015	0.003	MG/KG	
	1,1,1-TRICHLOROETHANE	0.004	U	U	0.00013	0.004	MG/KG	
	1,1,2,2-TETRACHLOROETHANE	0.002	U	U	0.00017	0.002	MG/KG	
	1,1,2-TRICHLOROETHANE	0.005	U	U	0.00016	0.005	MG/KG	
	1,1-DICHLOROETHANE	0.002	U	U	0.00011	0.002	MG/KG	
	1,1-DICHLOROETHENE	0.006	U	U	0.00015	0.006	MG/KG	
	1,1-DICHLOROPROPENE	0.005	U	U	0.00014	0.005	MG/KG	
	1,2,3-TRICHLOROBENZENE	0.002	U	U	0.00015	0.002	MG/KG	
	1,2,3-TRICHLOROPROPANE	0.02	U	U	0.00015	0.02	MG/KG	
	1,2,4-TRICHLOROBENZENE	0.002	U	U	0.00013	0.002	MG/KG	
	1,2,4-TRIMETHYLBENZENE	0.007	U	U	0.00009	0.007	MG/KG	
	2-DIBROMO-3-CHLOROPROPANE	0.01	U	U	0.00025	0.01	MG/KG	
	1,2-DIBROMOETHANE	0.003	U	U	0.00019	0.003	MG/KG	
	1,2-DICHLOROBENZENE	0.002	U	U	0.0001	0.002	MG/KG	
	1,2-DICHLOROETHANE	0.003	U	U	0.00033	0.003	MG/KG	
	1,2-DICHLOROPROPANE	0.002	U	U	0.00009	0.002	MG/KG	
	1,3,5-TRIMETHYLBENZENE	0.003	U	U	0.0001	0.003	MG/KG	
	1,3-DICHLOROBENZENE	0.006	U	U	0.00005	0.006	MG/KG	
	1,3-DICHLOROPROPANE	0.002	U	U	0.00015	0.002	MG/KG	
	1,4-DICHLOROBENZENE	0.002	U	U	0.00012	0.002	MG/KG	
	1-CHLOROHEXANE	0.003	U	U	0.00014	0.003	MG/KG	
	2,2-DICHLOROPROPANE	0.02	U	U	0.00032	0.02	MG/KG	
	2-CHLOROTOLUENE	0.002	U	U	0.0001	0.002	MG/KG	
	4-BROMOFLUOROBENZENE	114			0.003	0.003	ERCEN	
	4-CHLOROTOLUENE	0.003	U	U	0.00008	0.003	MG/KG	
	BENZENE	0.002	U	U	0.0001	0.002	MG/KG	
	BROMOBENZENE	0.002	U	U	0.00009	0.002	MG/KG	
	BROMOCHLOROMETHANE	0.002	U	U	0.00018	0.002	MG/KG	
	BROMODICHLOROMETHANE	0.004	U	U	0.0001	0.004	MG/KG	
	BROMOFORM	0.006	U	U	0.00018	0.006	MG/KG	
	BROMOMETHANE	0.005	U	U	0.0002	0.005	MG/KG	
	CARBON TETRACHLORIDE	0.01	U	U	0.00016	0.01	MG/KG	
	CHLOROBENZENE	0.002	U	U	0.00012	0.002	MG/KG	
	CHLOROETHANE	0.005	R	U	0.0003	0.005	MG/KG	IC%RSI
	CHLOROFORM	0.002	U	U	0.00015	0.002	MG/KG	
	CHLORMETHANE	0.007	U	U	0.00009	0.007	MG/KG	
	CIS-1,2-DICHLOROETHENE	0.006	U	U	0.00008	0.006	MG/KG	
	CIS-1,3-DICHLOROPROPENE	0.005	U	U	0.00011	0.005	MG/KG	
	DIBROMOCHLOROMETHANE	0.003	U	U	0.00016	0.003	MG/KG	
	DIBROMOFLUOROMETHANE	99			0.003	0.003	ERCEN	
	DIBROMOMETHANE	0.01	U	U	0.0002	0.01	MG/KG	
	DICHLORODIFLUOROMETHANE	0.005	R	U	0.00036	0.005	MG/KG	BD%R

6521149

9712123 SW8260A

Page 12 of 14

DICHLORODIFLUOROMETHANE	0.005	R	U	0.00036	0.005	MG/KG	BS%R
ETHYLBENZENE	0.003	U	U	0.00012	0.003	MG/KG	
HEXACHLOROBUTADIENE	0.005	U	U	0.0002	0.005	MG/KG	
ISOPROPYLBENZENE	0.008	R	U	0.00013	0.008	MG/KG	CV%D
M,P-XYLENE	0.007	U	U	0.00022	0.007	MG/KG	
METHYLENE CHLORIDE	0.002	R	U	0.00021	0.002	MG/KG	BD%R
METHYLENE CHLORIDE	0.002	R	U	0.00021	0.002	MG/KG	BS%R
METHYLENE CHLORIDE	0.002	R	U	0.00021	0.002	MG/KG	CV%D
METHYLENE CHLORIDE	0.002	R	U	0.00021	0.002	MG/KG	IC%RST
N-BUTYLBENZENE	0.005	U	U	0.00011	0.005	MG/KG	
N-PROPYLBENZENE	0.002	R	U	0.00009	0.002	MG/KG	CV%D
NAPHTHALENE	0.002	U	U	0.00012	0.002	MG/KG	
O-XYLENE	0.005	U	U	0.00013	0.005	MG/KG	
P-ISOPROPYLTOLUENE	0.006	U	U	0.00009	0.006	MG/KG	
SEC-BUTYLBENZENE	0.007	U	U	0.00012	0.007	MG/KG	
STYRENE	0.002	U	U	0.00012	0.002	MG/KG	
TERT-BUTYLBENZENE	0.007	U	U	0.00013	0.007	MG/KG	
TETRACHLOROETHENE	0.007	U	U	0.00017	0.007	MG/KG	
TOLUENE	0.005	U	U	0.00014	0.005	MG/KG	
TOLUENE-D8	99			0.003	0.003	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.003	U	U	0.00009	0.003	MG/KG	
TRANS-1,3-DICHLOROPROPENE	0.005	U	U	0.00017	0.005	MG/KG	
TRICHLOROETHENE	0.01	U	U	0.0001	0.01	MG/KG	
TRICHLOROFUOROMETHANE	0.004	U	U	0.00022	0.004	MG/KG	
VINYL CHLORIDE	0.009	U	U	0.00016	0.009	MG/KG	

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%D	LCSD percent recovery criteria exceeded
BS%D	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not requested
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatnx	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%D	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

6521151

9712123 SW8260A

Page 14 of 14

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFflag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

6521152

NAS FW JRB AOC 2**Data Quality Evaluation****CH2MHILL****SDG 9712185 Method SW9060****Reviewer nh Date 3/26/98 Matrix water**

Senior Review Vito D'Aurora

Field Samples**Samples 4, 6-8 and 10 reported detects > the RL.**

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
-----------------	------------------	-----------------	------------------	-----------------	------------------

Water

AHA062EB1	EB	AHA063	N	AHA064	N
AHA064MS1	MS	AHA064SD1	SD	AHA065	N
AHA066	N	AHA067	N	AHA068	N
AHA069FD1	FD				

**1. Case Narrative
Items of Interest**

1. All reagent blanks were < the RL.
2. The MS/MSD were performed on sample 5 instead of sample 7, due to an error by the analyst.

2. Blank Summary**Field Blanks Total Organic Carbon was not detected in the equipment blank.****Method Blanks All reagent blanks were < the RL.****3. Spikes and Duplicates****Field Duplicates All criteria were met.**

6521153

9712185 SW9060

Page 2 of 6

Laboratory Duplicates All RPD criteria were met. Sample 10 was listed as AHA060TB1 instead of AHA069FD1 on the duplicate form.

Matrix Spike The MS/MSD were performed on sample 5 instead of sample 7, due to an error by the analyst. All criteria were met.

4. Laboratory Control Sample None

5. Surrogates Not applicable.

6. Tuning and Mass Calibration Not applicable.

7. Internal Standard Not applicable.

8. Calibration Information

Initial Calibration All criteria were met.

Continuing Calibration All criteria were met.

9. Holding Time Holding times were met.

10. Summary

General Comments All criteria were met. No flagging necessary.

Data Package Completeness Sample 10 was listed as AHA060TB1 instead of AHA069FD1 on the duplicate form.

6521154

9712185 SW9060

Page 3 of 6

Forms Review/ Items of Interest Samples 4, 6-8 and 10 reported detects > the RL.

COC Review Complete.

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA063	TOTAL ORGANIC CARBON	4			1	1	MG/L	
AHA064	TOTAL ORGANIC CARBON	1	U	U	1	1	MG/L	
AHA065	TOTAL ORGANIC CARBON	2			MDL	RL	Units	Validation Reason
AHA066	TOTAL ORGANIC CARBON	10			1	—1	MG/L	
AHA067	TOTAL ORGANIC CARBON	2			MDL	RL	Units	Validation Reason
AHA068	TOTAL ORGANIC CARBON	1	U	U	1	1	MG/L	
AHA069FD1	TOTAL ORGANIC CARBON	11			MDL	RL	Units	Validation Reason

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%D	LCSD percent recovery criteria exceeded
BS%D	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run —
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%D	Matrix spike duplicate recovery exceeds criteria
Sur%D	Surrogate recovery exceeds criteria

6521157

9712185 SW9060

Page 6 of 6

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

6521158

NAS FW JRB AOC 2**Data Quality Evaluation****CH2MHILL****SDG 9712185****Method SW8260A****Reviewer nh****Date 3/26/98****Matrix water**

Senior Review Vito D'Aurora

Field Samples

Samples 4 and 5 were analyzed on a diluted basis. Trans-1,2-Dichloroethene, cis-1,2-Dichloroethene and Trichloroethene all reported high hits.

Field ID	QAQC Type	Field ID	QAQC Type	Field ID	QAQC Type
-----------------	------------------	-----------------	------------------	-----------------	------------------

Water

AHA060TB1	TB	AHA061AB1	AB	AHA062EB1	EB
AHA063	N	AHA064	N	AHA065	N
AHA066	N	AHA066MS1	MS	AHA066SD1	SD
AHA067	N	AHA068	N	AHA069FD1	FD
LABQC	BD				

1. Case Narrative**Items of Interest**

1. The method blank had Methylene Chloride detected > the reporting limit. This compound was detected in samples 1, 4 and 5, so the data were flagged.
2. Eight compounds in either the LCS and/or LCD were outside control limits. With the exception of Trichloroethene and Methylene Chloride, none of the other compounds were detected in the samples; therefore, the data were not affected.
3. Trichloroethene is within QC limits for the MS/MSD; therefore, data are not affected by the high recovery in the LCD.
4. Sixteen compounds exceeded criteria in either the MS and/or MSD. With the exception of Trichlorofluoromethane and Methylene Chloride, the recoveries of most of these compounds in the LCS/LCD were within control limits which demonstrated the spike outliers in the MSs were due to matrix effects, so no further action is needed.
5. The internal standard in sample 1 were outside the criteria. This laboratory oversight was discovered after HTs expired.
6. Several compounds from the ICV/CCV order curve were within the acceptance limit but exceeded the 15% RSD criteria. These were quantitated using the average response factor due to software problem.

2. Blank Summary

6521159

9712185 SW8260A

Page 2 of 17

Field Blanks All criteria were met.

Method Blanks 1. The method blank had Methylene Chloride detected > the reporting limit. This compound was detected in samples 1, 4 and 5, so the data were flagged U (by the lab).

<u>Blank Type</u>	<u>Blank ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Report Limit</u>	<u>LabFlag</u>	<u>Units</u>
LB	LABQC	METHYLENE CHLORI	0.44	0.21		UG/L

3. Spikes and Duplicates

Field Duplicates All criteria were met.**Laboratory Duplicates** None

Matrix Spike 1. Sixteen compounds exceeded the UCL % recovery criteria in either the MS and/or MSD. The positives were flagged J. Methylene Chloride exceeded the LCL % recovery in both the MS/MSD and the non-detects were flagged UJ.
2. The Styrene RPD exceeded the UCL; however, the samples were all non-detects. No validating needed.

MS RPD

<u>Analyte</u>	<u>Spike</u>	<u>Result</u>	<u>Dupe</u>	<u>Result</u>	<u>RPD</u>	<u>Criteria</u>	<u>Matrix</u>
STYRENE	MS	101	SD	67	40.48	20	WATER

Recovery

<u>Matrix</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>Analyte</u>	<u>Recovery</u>	<u>LowerLimit</u>	<u>UpperLimit</u>
WATER	MS	AHA066MS1	1,1,1-TRICHLOROETHANE	130	75	125
WATER	MS	AHA066MS1	1,1-DICHLOROETHANE	126	72	125
WATER	MS	AHA066MS1	1,1-DICHLOROETHENE	134	75	125
WATER	MS	AHA066MS1	1,2-DIBROMO-3-CHLOROP	127	59	125
WATER	MS	AHA066MS1	1,2-DICHLOROETHANE	145	68	127
WATER	MS	AHA066MS1	1,2-DICHLOROPROPANE	129	70	125
WATER	MS	AHA066MS1	2,2-DICHLOROPROPANE	73	75	125
WATER	MS	AHA066MS1	BROMODICHLOROMETHA	132	75	125
WATER	MS	AHA066MS1	CHLOROFORM	129	74	125
WATER	MS	AHA066MS1	CIS-1,2-DICHLOROETHEN	126	75	125
WATER	MS	AHA066MS1	DIBROMOMETHANE	132	69	127
WATER	MS	AHA066MS1	M,P-XYLENE	133	75	125
WATER	MS	AHA066MS1	METHYLENE CHLORIDE	70	75	125
WATER	MS	AHA066MS1	TRANS-1,2-DICHLOROETH	130	75	125
WATER	MS	AHA066MS1	TRICHLOROFLUOROMETH	129	67	125
WATER	SD	AHA066SD1	1,2-DICHLOROETHANE	141	68	127
WATER	SD	AHA066SD1	2,2-DICHLOROPROPANE	67	75	125
WATER	SD	AHA066SD1	DIBROMOMETHANE	131	69	127

6521160

9712185 SW8260A

Page 3 of 17

WATER SD	AHA066SD1	METHYLENE CHLORIDE	68	75	125
WATER SD	AHA066SD1	STYRENE	67	75	125
WATER SD	AHA066SD1	TRANS-1,2-DICHLOROETH	129	75	125

4. Laboratory Control Sample

1. Six compounds in the LCS were > the UCL. Due to the samples being non-detects, they were validated with a none flag.
2. Five compounds in the LCD were > the UCL. Due to the samples being non-detects, they were validated with a none flag, with the exception of Trichloroethene which was flagged a J for positive results in two samples.
3. Methylene Chloride in both the LCS/LCD was < the LCL and was flagged R in the samples for non-detects.

<u>Matrix</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>Analyte</u>	<u>Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
WATER BS	LABQC		1,2-DICHLOROETHANE	136	68	127
WATER BS	LABQC		1,2-DICHLOROPROPANE	128	70	125
WATER BS	LABQC		CHLOROETHANE	126	65	125
WATER BS	LABQC		DIBROMOMETHANE	128	69	127
WATER BS	LABQC		M,P-XYLENE	137	75	125
WATER BS	LABQC		METHYLENE CHLORIDE	59	75	125
WATER BS	LABQC		TRICHLOROFLUOROMETH	131	67	125
WATER BD	LABQC		1,2-DICHLOROETHANE	133	68	127
WATER BD	LABQC		M,P-XYLENE	138	75	125
WATER BD	LABQC		METHYLENE CHLORIDE	59	75	125
WATER BD	LABQC		TRANS-1,3-DICHLOROPRO	126	66	125
WATER BD	LABQC		TRICHLOROETHENE	127	71	125
WATER BD	LABQC		TRICHLOROFLUOROMETH	126	67	125

5. Surrogates

All criteria were met.

6. Tuning and Mass Calibration

All criteria met.

7. Internal Standard

The internal standard (1,4-Dichlorobenzene-d4) in sample 1 was outside criteria. This laboratory oversight was discovered after HTs expired. The 11 associated analytes in the Trip blank were not validated.

8. Calibration Information

Initial Calibration Methylene Chloride, Naphthalene and 1,2,3-Trichlorobenzene exceeded the %RSD criteria in the ICAL from 12/11/97. The applicable samples were flagged R.

<u>Field ID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation Reason</u>
AHA063	1,2,3-TRICHLOROBENZENE	R	IC%RSD
AHA064	1,2,3-TRICHLOROBENZENE	R	IC%RSD

6521161

9712185 SW8260A

Page 4 of 17

AHA065	1,2,3-TRICHLOROBENZENE	R	IC%RSD
AHA066	1,2,3-TRICHLOROBENZENE	R	IC%RSD
AHA067	1,2,3-TRICHLOROBENZENE	R	IC%RSD
AHA068	1,2,3-TRICHLOROBENZENE	R	IC%RSD
AHA069FD1	1,2,3-TRICHLOROBENZENE	R	IC%RSD
AHA063	METHYLENE CHLORIDE	R	IC%RSD
AHA064	METHYLENE CHLORIDE	R	IC%RSD
AHA065	METHYLENE CHLORIDE	R	IC%RSD
AHA066	METHYLENE CHLORIDE	R	IC%RSD
AHA067	METHYLENE CHLORIDE	R	IC%RSD
AHA068	METHYLENE CHLORIDE	R	IC%RSD
AHA069FD1	METHYLENE CHLORIDE	R	IC%RSD
AHA063	NAPHTHALENE	R	IC%RSD
AHA064	NAPHTHALENE	R	IC%RSD
AHA065	NAPHTHALENE	R	IC%RSD
AHA066	NAPHTHALENE	R	IC%RSD
AHA067	NAPHTHALENE	R	IC%RSD
AHA068	NAPHTHALENE	R	IC%RSD
AHA069FD1	NAPHTHALENE	R	IC%RSD

Continuing Calibration 1. Methylene Chloride exceeded the %RSD from the CCV of 12/23/97. The applicable samples were flagged R.
 2. Seven compounds were missing from the 12/11/97 water 2nd source CCV and two compounds fell outside the expected value. The seven analytes were flagged R in the samples and 1,1-dichloroethene and Methylene Chloride were flagged R for exceeding 25% of expected value.

<u>Field ID</u>	<u>LabsampleID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation</u>
AHA063	9712185-4	1-CHLOROHEXANE	R	CCVMiss
AHA063	9712185-4	BROMOMETHANE	R	CCVMiss
AHA063	9712185-4	CHLOROETHANE	R	CCVMiss
AHA063	9712185-4	CHLOROMETHANE	R	CCVMiss
AHA063	9712185-4	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA063	9712185-4	METHYLENE CHLORIDE	R	CV%D
AHA063	9712185-4	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA063	9712185-4	VINYL CHLORIDE	R	CCVMiss
AHA064	9712185-5	1-CHLOROHEXANE	R	CCVMiss
AHA064	9712185-5	BROMOMETHANE	R	CCVMiss
AHA064	9712185-5	CHLOROETHANE	R	CCVMiss
AHA064	9712185-5	CHLOROMETHANE	R	CCVMiss
AHA064	9712185-5	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA064	9712185-5	METHYLENE CHLORIDE	R	CV%D
AHA064	9712185-5	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA064	9712185-5	VINYL CHLORIDE	R	CCVMiss
AHA065	9712185-6	1-CHLOROHEXANE	R	CCVMiss

6521162

9712185 SW8260A

Page 5 of 17

AHA065	9712185-6	BROMOMETHANE	R	CCVMiss
AHA065	9712185-6	CHLOROETHANE	R	CCVMiss
AHA065	9712185-6	CHLOROMETHANE	R	CCVMiss
AHA065	9712185-6	1,1CHLORODIFLUOROMETHANE	R	CCVMiss
AHA065	9712185-6	METHYLENE CHLORIDE	R	CV%D
AHA065	9712185-6	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA065	9712185-6	VINYL CHLORIDE	R	CCVMiss
AHA066	9712185-7	1-CHLOROHEXANE	R	CCVMiss
AHA066	9712185-7	BROMOMETHANE	R	CCVMiss
AHA066	9712185-7	CHLOROETHANE	R	CCVMiss
AHA066	9712185-7	CHLOROMETHANE	R	CCVMiss
AHA066	9712185-7	1,1CHLORODIFLUOROMETHANE	R	CCVMiss
AHA066	9712185-7	METHYLENE CHLORIDE	R	CV%D
AHA066	9712185-7	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA066	9712185-7	VINYL CHLORIDE	R	CCVMiss
AHA067	9712185-8	1-CHLOROHEXANE	R	CCVMiss
AHA067	9712185-8	BROMOMETHANE	R	CCVMiss
AHA067	9712185-8	CHLOROETHANE	R	CCVMiss
AHA067	9712185-8	CHLOROMETHANE	R	CCVMiss
AHA067	9712185-8	1,1CHLORODIFLUOROMETHANE	R	CCVMiss
AHA067	9712185-8	METHYLENE CHLORIDE	R	CV%D
AHA067	9712185-8	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA067	9712185-8	VINYL CHLORIDE	R	CCVMiss
AHA068	9712185-9	1-CHLOROHEXANE	R	CCVMiss
AHA068	9712185-9	BROMOMETHANE	R	CCVMiss
AHA068	9712185-9	CHLOROETHANE	R	CCVMiss
AHA068	9712185-9	CHLOROMETHANE	R	CCVMiss
AHA068	9712185-9	1,1CHLORODIFLUOROMETHANE	R	CCVMiss
AHA068	9712185-9	METHYLENE CHLORIDE	R	CV%D
AHA068	9712185-9	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA068	9712185-9	VINYL CHLORIDE	R	CCVMiss
AHA069FD1	9712185-10	1-CHLOROHEXANE	R	CCVMiss
AHA069FD1	9712185-10	BROMOMETHANE	R	CCVMiss
AHA069FD1	9712185-10	CHLOROETHANE	R	CCVMiss
AHA069FD1	9712185-10	CHLOROMETHANE	R	CCVMiss
AHA069FD1	9712185-10	1,1CHLORODIFLUOROMETHANE	R	CCVMiss
AHA069FD1	9712185-10	METHYLENE CHLORIDE	R	CV%D
AHA069FD1	9712185-10	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA069FD1	9712185-10	VINYL CHLORIDE	R	CCVMiss

9. Holding Time

Holding times were met.

6521163

9712185 SW8260A

Page 6 of 17

10. Summary

- General Comments**
1. Six compounds in the LCS were > the UCL. Due to the samples being non-detects, they were validated with a none flag.
 2. Five compounds in the LCD were > the UCL. Due to the samples being non-detects, they were validated with a none flag, with the exception of Trichloroethene which was flagged a J for positive results in two samples.
 3. Methylene Chloride in both the LCS/LCD was < the LCL and was flagged R in the samples for non-detects.
 4. Sixteen compounds exceeded the UCL % recovery criteria in either the MS and/or MSD. The positives were flagged J. 5. Methylene Chloride exceeded the LCL % recovery in both the MS/MSD and the non-detects were flagged UJ.
 6. Methylene Chloride, Naphthalene and 1,2,3-Trichlorobenzene exceeded the %RSD criteria in the ICAL from 12/11/97. The applicable samples were flagged R.
 7. Methylene Chloride exceeded the %RSD from the CCV of 12/23/97. The applicable samples were flagged R.
 8. Seven compounds were missing from the 12/11/97 water 2nd source CCV and two compounds fell outside the expected value. The seven analytes were flagged R in the samples and 1,1-dichloroethene and Methylene Chloride were flagged R for exceeding 25% of expected value.

Data Package Completeness 1. The case narrative did not follow the package contents.

Forms Review/ Items of Interest Nothing of interest.

COC Review Complete.

6521161

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA063	1,1,1,2-TETRACHLOROETHANE	13	U	U	3.7	13	UG/L	
	1,1,1-TRICHLOROETHANE	20	U	U	3.25	20	UG/L	
	1,1,2,2-TETRACHLOROETHANE	10	U	U	4.25	10	UG/L	
	1,1,2-TRICHLOROETHANE	25	U	U	4	25	UG/L	
	1,1-DICHLOROETHANE	10	U	U	2.75	10	UG/L	
	1,1-DICHLOROETHENE	30	R	U	3.75	30	UG/L	SSCCV%
	1,1-DICHLOROPROPENE	25	U	U	3.5	25	UG/L	
	1,2,3-TRICHLOROBENZENE	7.5	R	U	3.75	7.5	UG/L	IC%RSI
	1,2,3-TRICHLOROPROPANE	80	U	U	3.75	80	UG/L	
	1,2,4-TRICHLOROBENZENE	10	U	U	3.25	10	UG/L	
	1,2,4-TRIMETHYLBENZENE	33	U	U	2.25	33	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	65	U	U	6.25-	65	UG/L	
	1,2-DIBROMOETHANE	15	U	U	4.75	15	UG/L	
	1,2-DICHLOROBENZENE	7.5	U	U	2.5	7.5	UG/L	
	1,3,5-TRIMETHYLBENZENE	13	U	U	2.5	13	UG/L	
	1,3-DICHLOROBENZENE	30	U	U	1.25	30	UG/L	
	1,3-DICHLOROPROPANE	10	U	U	3.75	10	UG/L	
	1,4-DICHLOROBENZENE	7.5	U	U	3-	7.5	UG/L	
	1-CHLOROHEXANE	13	R	U	3.5	13	UG/L	CCVMissi
	2,2-DICHLOROPROPANE	88	U	U	8	88	UG/L	
	2-CHLOROTOLUENE	10	U	U	2.5	10	UG/L	
	4-BROMOFLUOROBENZENE	105	U	-	2.5	2.5	ERCEN	
	4-CHLORTOLUENE	15	U	U	2	15	UG/L	
	BENZENE	10	U	U	2.5	10	UG/L	
	BROMOBENZENE	7.5	U	U	2.25	7.5	UG/L	
	BROMOCHLOROMETHANE	10	U	U	4.5	10	UG/L	
	BROMODICHLOROMETHANE	20	U	U	2.5	20	UG/L	
	BROMOFORM	30	U	U	4.5	30	UG/L	
	BROMOMETHANE	28	R	U	5	28	UG/L	CCVMissi
	CARBON TETRACHLORIDE	53	U	U	4	53	UG/L	
	CHLOROBENZENE	10	U	U	3	10	UG/L	
	CHLOROETHANE	25	R	U	7.5	25	UG/L	CCVMissi
	CHLOROFORM	7.5	U	U	3.75	7.5	UG/L	
	CHLOROMETHANE	33	R	U	2.25	33	UG/L	CCVMissi
	CIS-1,2-DICHLOROETHENE	250	J	U	2	30	UG/L	MS%R
	CIS-1,3-DICHLOROPROPENE	25	U	U	2.75	25	UG/L	
	DIBROMOCHLOROMETHANE	13	U	U	4	13	UG/L	
	DIBROMOFLUOROMETHANE	107	U	-	2.5	2.5	ERCEN	
	DICHLORODIFLUOROMETHANE	25	R	U	9	25	UG/L	CCVMissi
	ETHYLBENZENE	15	U	U	3	15	UG/L	
	HEXAChLOROBUTADIENE	28	U	U	5	28	UG/L	
	ISOPROPYLBENZENE	13	U	U	3.25	13	UG/L	
	METHYLENE CHLORIDE	29	R	U	5.25	7.5	UG/L	SSCCV%
	METHYLENE CHLORIDE	29	R	U	5.25	7.5	UG/L	CV%D
	METHYLENE CHLORIDE	29	R	U	5.25	7.5	UG/L	BS%R
	METHYLENE CHLORIDE	29	R	U	5.25	7.5	UG/L	BD%R

6521165

9712185 SW8260A

Page 8 of 17

N-BUTYLBENZENE	28	U	U	2.75	28	UG/L	
N-PROPYLBENZENE	10	U	U	2.25	10	UG/L	
NAPHTHALENE	10	R	U	3	10	UG/L	IC%RSI
O-XYLENE	28	U	U	3.25	28	UG/L	
P-ISOPROPYLtolUENE	30	U	U	2.25	30	UG/L	
SEC-BUTYLBENZENE	33	U	U	3	33	UG/L	
STYRENE	10	U	U	3	10	UG/L	
TERT-BUTYLBENZENE	35	U	U	3.25	35	UG/L	
TETRACHLOROETHENE	35	U	U	4.25	35	UG/L	
TOLUENE	14	F	F	3.5	28	UG/L	
TOLUENE-D8	112			2.5	2.5	ERCEN	
TRANS-1,2-DICHLOROETHENE	69	J		2.25	15	UG/L	MS%R
TRANS-1,2-DICHLOROETHENE	69	J		2.25	15	UG/L	SD%R
TRICHLOROETHENE	620	J		2.5	25	UG/L	BD%R
TRICHLOROFUOROMETHANE	20	R	U	5.5	20	UG/L	CCVMissi
VINYL CHLORIDE	28	R	U	4	28	UG/L	CCVMissi

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA064	1,1,1,2-TETRACHLOROETHANE	13	U	U	3.7	13	UG/L	
	1,1,1-TRICHLOROETHANE	20	U	U	3.25	20	UG/L	
	1,1,2,2-TETRACHLOROETHANE	10	U	U	4.25	10	UG/L	
	1,1,2-TRICHLOROETHANE	25	U	U	4	25	UG/L	
	1,1-DICHLOROETHANE	10	U	U	2.75	10	UG/L	
	1,1-DICHLOROETHENE	30	R	U	3.75	30	UG/L	SSCCV%
	1,1-DICHLOROPROPENE	25	U	U	3.5	25	UG/L	
	1,2,3-TRICHLOROBENZENE	7.5	R	U	3.75	7.5	UG/L	IC%RSI
	1,2,3-TRICHLOROPROPANE	80	U	U	3.75	80	UG/L	
	1,2,4-TRICHLOROBENZENE	10	U	U	3.25	10	UG/L	
	1,2,4-TRIMETHYLBENZENE	33	U	U	2.25	33	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	65	U	U	6.25	65	UG/L	
	1,2-DIBROMOETHANE	15	U	U	4.75	15	UG/L	
	1,2-DICHLOROBENZENE	7.5	U	U	2.5	7.5	UG/L	
	1,3,5-TRIMETHYLBENZENE	13	U	U	2.5	13	UG/L	
	1,3-DICHLOROBENZENE	30	U	U	1.25	30	UG/L	
	1,3-DICHLOROPROPANE	10	U	U	3.75	10	UG/L	
	1,4-DICHLOROBENZENE	7.5	U	U	3	7.5	UG/L	
	1-CHLOROHEXANE	13	R	U	3.5	13	UG/L	CCVMissi
	2,2-DICHLOROPROPANE	88	U	U	8	88	UG/L	
	2-CHLOROTOLUENE	10	U	U	2.5	10	UG/L	
	4-BROMOFLUOROBENZENE	102			2.5	2.5	ERCEN	
	4-CHLOROTOLUENE	15	U	U	2	15	UG/L	
	BENZENE	10	U	U	2.5	10	UG/L	
	BROMOBENZENE	7.5	U	U	2.25	7.5	UG/L	
	BROMOCHLOROMETHANE	10	U	U	4.5	10	UG/L	
	BROMODICHLOROMETHANE	20	U	U	2.5	20	UG/L	
	BROMOFORM	30	U	U	4.5	30	UG/L	
	BROMOMETHANE	28	R	U	5	28	UG/L	CCVMissi
	CARBON TETRACHLORIDE	53	U	U	4	53	UG/L	
	CHLOROBENZENE	10	U	U	3	10	UG/L	
	CHLOROETHANE	25	R	U	7.5	25	UG/L	CCVMissi
	CHLOROFORM	7.5	U	U	3.75	7.5	UG/L	
	CHLOROMETHANE	33	R	U	2.25	33	UG/L	CCVMissi
	CIS-1,2-DICHLOROETHENE	75	J		2	30	UG/L	MS%R
	CIS-1,3-DICHLOROPROPENE	25	U	U	2.75	25	UG/L	
	DIBROMOCHLOROMETHANE	13	U	U	4	13	UG/L	

6521166

DIBROMOFLUOROMETHANE	107			2.5	2.5	ERCEN	
DICHLORODIFLUOROMETHANE	25	R	U	9	25	UG/L	CCVMissi
ETHYLBENZENE	15	U	U	3	15	UG/L	
HEXACHLOROBUTADIENE	28	U	U	5	28	UG/L	
ISOPROPYLBENZENE	13	U	U	3.25	13	UG/L	
METHYLENE CHLORIDE	26	R	U	5.25	7.5	UG/L	BD%R
METHYLENE CHLORIDE	26	R	U	5.25	7.5	UG/L	BS%R
METHYLENE CHLORIDE	26	R	U	5.25	7.5	UG/L	CV%D
METHYLENE CHLORIDE	26	R	U	5.25	7.5	UG/L	IC%RSI
METHYLENE CHLORIDE	26	R	U	5.25	7.5	UG/L	SSCCV%
N-BUTYLBENZENE	28	U	U	2.75	28	UG/L	
N-PROPYLBENZENE	10	U	U	2.25	10	UG/L	
NAPHTHALENE	10	R	U	3	10	UG/L	IC%RSI
O-XYLENE	28	U	U	3.25	28	UG/L	
P-ISOPROPYLTOLUENE	30	U	U	2.25	30	UG/L	
SEC-BUTYLBENZENE	33	U	U	3	33	UG/L	
STYRENE	10	U	U	3	10	UG/L	
TERT-BUTYLBENZENE	35	U	U	3.25	35	UG/L	
TETRACHLOROETHENE	35	U	U	4.25	35	UG/L	
TOLUENE	28	U	U	3.5	28	UG/L	
TOLUENE-D8	108			2.5	2.5	ERCEN	
TRANS-1,2-DICHLOROETHENE	53	J		2.25	15	UG/L	SD%R
TRANS-1,2-DICHLOROETHENE	53	J		2.25	15	UG/L	MS%R
TRICHLOROETHENE	540	J		2.5	25	UG/L	BD%R
TRICHLOROFLUOROMETHANE	20	R	U	5.5	20	UG/L	CCVMissi
VINYL CHLORIDE	28	R	U	4	28	UG/L	CCVMissi

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA065	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.148	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	U	U	0.16	1	UG/L	
	1,1-DICHLOROETHANE	0.4	U	U	0.11	0.4	UG/L	
	1,1-DICHLOROETHENE	1.2	R	U	0.15	1.2	UG/L	SSCCV%
	1,1-DICHLOROPROPENE	1	U	U	0.14	1	UG/L	
	1,2,3-TRICHLOROBENZENE	0.3	R	U	0.15	0.3	UG/L	IC%RSI
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	U	U	0.13	0.4	UG/L	
	1,2,4-TRIMETHYLBENZENE	1.3	U	U	0.09	1.3	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	2.6	U	U	0.25	2.6	UG/L	
	1,2-DIBROMOETHANE	0.6	U	U	0.19	0.6	UG/L	
	1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
	1,3,5-TRIMETHYLBENZENE	0.5	U	U	0.1	0.5	UG/L	
	1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
	1,3-DICHLOROPROPANE	0.4	U	U	0.15	0.4	UG/L	
	1,4-DICHLOROBENZENE	0.3	U	U	0.12	0.3	UG/L	
	1-CHLOROHEXANE	0.5	R	U	0.14	0.5	UG/L	CCVMissi
	2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L	
	2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	
	4-BROMOFLUOROBENZENE	105			0.1	0.1	ERCEN	
	4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L	
	BENZENE	0.4	U	U	0.1	0.4	UG/L	
	BROMOBENZENE	0.3	U	U	0.09	0.3	UG/L	
	BROMOCHLOROMETHANE	0.4	U	U	0.18	0.4	UG/L	
	BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L	

BROMOFORM	1.2	U	U	0.18	1.2	UG/L	
BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	CCVMissi
CARBON TETRACHLORIDE	2.1	U	U	0.16	2.1	UG/L	
CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	
CHLOROETHANE	1	R	U	0.3	1	UG/L	CCVMissi
CHLOROFORM	0.3	U	U	0.15	0.3	UG/L	
CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	CCVMissi
CIS-1,2-DICHLOROETHENE	1.2	U	U	0.08	1.2	UG/L	
CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L	
DIBROMOCHLOROMETHANE	0.5	U	U	0.16	0.5	UG/L	
DIBROMOFLUOROMETHANE	105			0.1	0.1	ERCEN	
DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L	CCVMissi
ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L	
HEXACHLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L	
ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L	
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BD%R
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BS%R
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	CV%D
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	IC%RSI
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	SSCCV%
N-BUTYLBENZENE	1.1	U	U	0.11	1.1	UG/L	
N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L	
NAPHTHALENE	0.4	R	U	0.12	0.4	UG/L	IC%RSI
O-XYLENE	1.1	U	U	0.13	1.1	UG/L	
P-ISOPROPYLtolUENE	1.2	U	U	0.09	1.2	UG/L	
SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L	
STYRENE	0.4	U	U	0.12	0.4	UG/L	
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L	
TETRACHLOROETHENE	1.4	U	U	0.17	1.4	UG/L	
TOLUENE	1.1	U	U	0.14	1.1	UG/L	
TOLUENE-D8	105			0.1	0.1	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.6	U	U	0.09	0.6	UG/L	
TRICHLOROFUOROMETHANE	0.8	R	U	0.22	0.8	UG/L	CCVMissi
VINYL CHLORIDE	1.1	R	U	0.16	-1.1	UG/L	CCVMissi

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA066	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.148	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	-UG/L	
	1,1,2-TRICHLOROETHANE	1	U	U	0.16	1	UG/L	
	1,1-DICHLOROETHANE	0.4	U	U	0.11	0.4	UG/L	
	1,1-DICHLOROETHENE	1.2	R	U	0.15	1.2	UG/L	SSCCV%
	1,1-DICHLOROPROPENE	1	U	U	0.14	1	UG/L	
	1,2,3-TRICHLOROBENZENE	0.3	R	U	0.15	0.3	UG/L	IC%RSI
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	U	U	0.13	0.4	UG/L	
	1,2,4-TRIMETHYLBENZENE	1.3	U	U	0.09	1.3	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	2.6	U	U	0.25	2.6	UG/L	
	1,2-DIBROMOETHANE	0.6	U	U	0.19	0.6	UG/L	
	1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
	1,3,5-TRIMETHYLBENZENE	0.5	U	U	0.1	0.5	UG/L	
	1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
	1,3-DICHLOROPROPANE	0.4	U	U	0.15	0.4	UG/L	
	1,4-DICHLOROBENZENE	0.3	U	U	0.12	0.3	UG/L	
	1-CHLOROHEXANE	0.5	R	U	0.14	0.5	UG/L	CCVMissi

2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L
2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L
4-BROMOFLUOROBENZENE	103			0.1	0.1	ERCEN
4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L
BENZENE	0.4	U	U	0.1	0.4	UG/L
BROMOBENZENE	0.3	U	U	0.09	0.3	UG/L
BROMOCHLOROMETHANE	0.4	U	U	0.18	0.4	UG/L
BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L
BROMOFORM	1.2	U	U	0.18	1.2	UG/L
BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L
CARBON TETRACHLORIDE	2.1	U	U	0.16	2.1	UG/L
CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L
CHLOROETHANE	1	R	U	0.3	1	UG/L
CHLOROFORM	0.3	U	U	0.15	0.3	UG/L
CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L
CIS-1,2-DICHLOROETHENE	1.2	U	U	0.08	1.2	UG/L
CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L
DIBROMOCHLOROMETHANE	0.5	U	U	0.16	0.5	UG/L
DIBROMOFLUOROMETHANE	114			0.1	0.1	ERCEN
DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L
ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L
HEXACHLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L
ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L
N-BUTYLBENZENE	1.1	U	U	0.11	1.1	UG/L
N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L
NAPHTHALENE	0.4	R	U	0.12	0.4	UG/L
O-XYLENE	1.1	U	U	0.13	1.1	UG/L
P-ISOPROPYLtolUENE	4.2	U	U	0.09	1.2	UG/L
SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L
STYRENE	0.4	U	U	0.12	0.4	UG/L
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L
TETRACHLOROETHENE	1.4	U	U	0.17	1.4	UG/L
TOLUENE	1.1	U	U	0.14	1.1	UG/L
TOLUENE-D8	111			0.1	0.1	ERCEN
TRANS-1,2-DICHLOROETHENE	0.6	U	U	0.09	0.6	UG/L
TRICHLOROFUOROMETHANE	0.8	R	U	0.22	0.8	UG/L
VINYL CHLORIDE	1.1	R	U	0.16	1.1	UG/L

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA067	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.148	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	U	U	0.16	1	UG/L	
	1,1-DICHLOROETHANE	0.4	U	U	0.11	0.4	UG/L	
	1,1-DICHLOROETHENE	1.2	R	U	0.15	1.2	UG/L	SSCCV%
	1,1-DICHLOROPROPENE	1	U	U	0.14	1	UG/L	
	1,2,3-TRICHLOROBENZENE	0.3	R	U	0.15	0.3	UG/L	IC%RSI
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	U	U	0.13	0.4	UG/L	
	1,2,4-TRIMETHYLBENZENE	1.3	U	U	0.09	1.3	UG/L	CCVMissi

6521169

9712185 SW8260A

Page 12 of 17

2-DIBROMO-3-CHLOROPROPANE	2.6	U	U	0.25	2.6	UG/L	
1,2-DIBROMOETHANE	0.6	U	U	0.19	0.6	UG/L	
1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
1,3,5-TRIMETHYLBENZENE	0.5	U	U	0.1	0.5	UG/L	
1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
1,3-DICHLOROPROPANE	0.4	U	U	0.15	0.4	UG/L	
1,4-DICHLOROBENZENE	0.3	U	U	0.12	0.3	UG/L	
1-CHLOROHEXANE	0.5	R	U	0.14	0.5	UG/L	CCVMissi
2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L	
2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	
4-BROMOFLUOROBENZENE	109			0.1	0.1	ERCEN	
4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L	
BENZENE	0.4	U	U	0.1	0.4	UG/L	
BROMOBENZENE	0.3	U	U	0.09	0.3	UG/L	
BROMOCHLOROMETHANE	0.4	U	U	0.18	0.4	UG/L	
BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L	
BROMOFORM	1.2	U	U	0.18	1.2	UG/L	
BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	CCVMissi
CARBON TETRACHLORIDE	2.1	U	U	0.16	2.1	UG/L	
CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	
CHLOROETHANE	1	R	U	0.3	1	UG/L	CCVMissi
CHLOROFORM	0.3	U	U	0.15	0.3	UG/L	
CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	CCVMissi
CIS-1,2-DICHLOROETHENE	1.2	U	U	0.08	1.2	UG/L	
CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L	
DIBROMOCHLOROMETHANE	0.5	U	U	0.16	0.5	UG/L	
DIBROMOFLUOROMETHANE	106			0.1	0.1	ERCEN	
DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L	CCVMissi
ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L	
HEXAChLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L	
ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L	
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BD%R
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BS%R
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	CV%D
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	IC%RSI
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	SSCCV%
N-BUTYLBENZENE	1.1	U	U	0.11	1.1	UG/L	
N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L	
NAPHTHALENE	0.4	R	U	0.12	0.4	UG/L	IC%RSI
O-XYLENE	1.1	U	U	0.13	1.1	UG/L	
P-ISOPROPYLtolUENE	1.2	U	U	0.09	1.2	UG/L	
SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L	
STYRENE	0.4	U	U	0.12	0.4	UG/L	
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L	
TETRACHLOROETHENE	1.4	U	U	0.17	1.4	UG/L	
TOLUENE	1.1	U	U	0.14	1.1	UG/L	
TOLUENE-D8	111			0.1	0.1	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.6	U	U	0.09	0.6	UG/L	
TRICHLOROFUOROMETHANE	0.8	R	U	0.22	0.8	UG/L	CCVMissi
VINYL CHLORIDE	1.1	R	U	0.16	1.1	UG/L	CCVMissi

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA068	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.148	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	

JULY 23

6521170

1,1,2-TRICHLOROETHANE	1	U	U	0.16	1	UG/L	
1,1-DICHLOROETHANE	0.4	U	U	0.11	0.4	UG/L	
1,1-DICHLOROETHENE	1.2	R	U	0.15	1.2	UG/L	SSCCV%
1,1-DICHLOROPROPENE	1	U	U	0.14	1	UG/L	
1,2,3-TRICHLOROBENZENE	0.3	R	U	0.15	0.3	UG/L	IC%RSI
1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
1,2,4-TRICHLOROBENZENE	0.4	U	U	0.13	0.4	UG/L	
1,2,4-TRIMETHYLBENZENE	1.3	U	U	0.09	1.3	UG/L	
2-DIBROMO-3-CHLOROPROPANE	2.6	U	U	0.25	2.6	UG/L	
1,2-DIBROMOETHANE	0.6	U	U	0.19	0.6	UG/L	
1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
1,3,5-TRIMETHYLBENZENE	0.5	U	U	0.1	0.5	UG/L	
1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
1,3-DICHLOROPROPANE	0.4	U	U	0.15	0.4	UG/L	
1,4-DICHLOROBENZENE	0.3	U	U	0.12	0.3	UG/L	
1-CHLOROHEXANE	0.5	R	U	0.14	0.5	UG/L	CCVMissi
2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L	
2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	
4-BROMOFLUOROBENZENE	97			0.1	0.1	ERCEN	
4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L	
BENZENE	0.4	U	U	0.1	0.4	UG/L	
BROMOBENZENE	0.3	U	U	0.09	0.3	UG/L	
BROMOCHLOROMETHANE	0.4	U	U	0.18	0.4	UG/L	
BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L	
BROMOFORM	1.2	U	U	0.18	1.2	UG/L	
BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	CCVMissi
CARBON TETRACHLORIDE	2.1	U	U	0.16	2.1	UG/L	
CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	
CHLOROETHANE	1	R	U	0.3	1	UG/L	CCVMissi
CHLOROFORM	0.3	U	U	0.15	0.3	UG/L	
CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	CCVMissi
CIS-1,2-DICHLOROETHENE	1.2	U	U	0.08	1.2	UG/L	
CIS-1,3-DICHLOROPROPENE	1 —	U	U	0.11	—	UG/L	
DIBROMOCHLOROMETHANE	0.5	U	U	0.16	0.5	UG/L	
DIBROMOFLUOROMETHANE	107			0.1	0.1	ERCEN	
DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L	CCVMissi
ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L	
HEXAChLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L	
ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L	
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	SSCCV%
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BD%R
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	IC%RSI
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	CV%D
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BS%R
N-BUTYLBENZENE	1.1	U	U	0.11	1.1	UG/L	
N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L	
NAPHTHALENE	0.4	R	U	0.12	0.4	UG/L	IC%RSI
O-XYLENE	1.1	U	U	0.13	1.1	UG/L	
P-ISOPROPYLtolUENE	1.2	U	U	0.09	1.2	UG/L	
SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L	
STYRENE	0.4	U	U	0.12	0.4	UG/L	
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L	
TETRAChLOROETHENE	1.4	U	U	0.17	1.4	UG/L	
TOLUENE	1.1	U	U	0.14	1.1	UG/L	
TOLUENE-D8	99			0.1	0.1	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.6	U	U	0.09	0.6	UG/L	

6521171

9712185 SW8260A

Page 14 of 17

TRICHLOROFLUOROMETHANE	0.8	R	U	0.22	0.8	UG/L	CCVMissi
VINYL CHLORIDE	1.1	R	U	0.16	1.1	UG/L	CCVMissi

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA069FD1	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.148	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	U	U	0.16	1	UG/L	
	1,1-DICHLOROETHANE	0.4	U	U	0.11	0.4	UG/L	
	1,1-DICHLOROETHENE	1.2	R	U	0.15	1.2	UG/L	SSCCV%
	1,1-DICHLOROPROPENE	1	U	U	0.14	1	UG/L	
	1,2,3-TRICHLOROBENZENE	0.3	R	U	0.15	0.3	UG/L	IC%RSI
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	U	U	0.13	0.4	UG/L	
	1,2,4-TRIMETHYLBENZENE	1.3	U	U	0.09	1.3	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	2.6	U	U	0.25	2.6	UG/L	
	1,2-DIBROMOETHANE	0.6	U	U	0.19	0.6	UG/L	
	1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
	1,3,5-TRIMETHYLBENZENE	0.5	U	U	0.1	0.5	UG/L	
	1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
	1,3-DICHLOROPROPANE	0.4	U	U	0.15	0.4	UG/L	
	1,4-DICHLOROBENZENE	0.3	U	U	0.12	0.3	UG/L	
	1-CHLOROHEXANE	0.5	R	U	0.14	0.5	UG/L	CCVMissi
	2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L	
	2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	
	4-BROMOFLUOROBENZENE	109			0.1	0.1	ERCEN	
	4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L	
	BENZENE	0.4	U	U	0.1	0.4	UG/L	
	BROMOBENZENE	0.3	U	U	0.09	0.3	UG/L	
	BROMOCHLOROMETHANE	0.4	U	U	0.18	0.4	UG/L	
	BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L	
	BROMOFORM	1.2	U	U	0.18	1.2	UG/L	
	BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	CCVMissi
	CARBON TETRACHLORIDE	2.1	U	U	0.16	2.1	UG/L	
	CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	
	CHLOROETHANE	1	R	U	0.3	1	UG/L	CCVMissi
	CHLOROFORM	0.3	U	U	0.15	0.3	UG/L	
	CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	CCVMissi
	CIS-1,2-DICHLOROETHENE	1.2	U	U	0.08	1.2	UG/L	
	CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L	
	DIBROMOCHLOROMETHANE	0.5	U	U	0.16	0.5	UG/L	
	DIBROMOFLUOROMETHANE	116			0.1	0.1	ERCEN	
	DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L	CCVMissi
	ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L	
	HEXAChLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L	
	ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L	
	METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BD%R
	METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BS%R
	METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	CV%D
	METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	IC%RSI
	METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	SSCCV%
	N-BUTYLBENZENE	1.1	U	U	0.11	1.1	UG/L	
	N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L	
	NAPHTHALENE	0.4	R	U	0.12	0.4	UG/L	IC%RSI
	O-XYLENE	1.1	U	U	0.13	1.1	UG/L	

P-ISOPROPYL TOLUENE	1.2	U	U	0.09	1.2	UG/L
SEC-BUTYLEBENZENE	1.3	U	U	0.12	1.3	UG/L
STYRENE	0.4	U	U	0.12	0.4	UG/L
TERT-BUTYLEBENZENE	1.4	U	U	0.13	1.4	UG/L
TETRACHLOROETHENE	1.4	U	U	0.17	1.4	UG/L
TOLUENE	1.1	U	U	0.14	1.1	UG/L
TOLUENE-D8	106			0.1	0.1	ERCEN
TRANS-1,2-DICHLOROETHENE	0.6	U	U	0.09	0.6	UG/L
TRICHLOROFLUOROMETHANE	0.8	R	U	0.22	0.8	UG/L
VINYL CHLORIDE	1.1	R	U	0.16	1.1	UG/L
						CCVMissi
						CCVMissi

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrx	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL)

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

6521175



CH2MHILL

NAS FW JRB AOC 2

Data Quality Evaluation

SDG 9712185

Method SW6010A

Reviewer nh

Date 3/30/98

Matrix water

Senior Review Vito D'Aurora

Field Samples

All analytes with the exception of Lead reported high hits.

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
-----------------	------------------	-----------------	------------------	-----------------	------------------

Water

AHA062EB1	EB	AHA063	N	AHA064	N
AHA065	N	AHA066	N	AHA066D	LR
AHA066MS1	MS	AHA066SD1	SD	AHA067	N
AHA068	N	AHA069FD1	FD	LCSWD	BD

1. Case Narrative Items of Interest

1. The method blanks results were < the PQL.
2. Initial and CCBs were < the PQL.
3. Calcium did not meet acceptance criteria. The concentration of Calcium in the native sample was > than 4 times the concentration of matrix spike added during the digestion. When sample concentration is that much greater than the spike added, spike recoveries may not be accurate. The LCS indicates the digestion and analysis were in control.
4. Potassium did not meet the serial dilution acceptance criteria for sample 7. Results of the spike were acceptable indicating the matrix was not significantly affecting quantitation of the analytes.

- 2. Blank Summary

Field Blanks Calcium was detected, but there was no effect on the samples. They were all > the calculated value.

Method Blanks The method blanks results were < the PQL.

<u>Blank Type</u>	<u>Blank ID</u>	<u>Analyte</u>	<u>Result</u>	<u>ReportLimit</u>	<u>LabFlag</u>	<u>Units</u>
-------------------	-----------------	----------------	---------------	--------------------	----------------	--------------

6521176

9712185 SW6010A

Page 2 of 7

LB	PBW	MAGNESIUM	-75.79	21.4	F	UG/L
LB	PBW	LEAD	-0.98	0.7	F	UG/L
LB	PBW	IRON	25.97	15.3	F	UG/L
EB	AHA062EB1	IRON	32.4	15.3	F	UG/L
EB	AHA062EB1	SODIUM	132	46.7	F	UG/L
EB	AHA062EB1	POTASSIUM	111	40.9	F	UG/L
EB	AHA062EB1	CALCIUM	194	38.5		UG/L

3. Spikes and Duplicates

Field Duplicates Aluminum exceeded the RPD and > 5 times the PQL criteria. The FD pair were flagged J for positives.

<u>Analyte</u>	<u>Normal Sample</u>	<u>Result</u>	<u>Field Dupe</u>	<u>Result</u>	<u>RPD</u>	<u>Criteria</u>	<u>Matrix</u>
ALUMINUM	AHA066	1050	AHA069FD1	852	20.82	15	WATER

Laboratory Duplicates None

Matrix Spike 1. Calcium did not meet acceptance criteria. The concentration of Calcium in the native sample was > than 4 times the concentration of matrix spike added during the digestion. When sample concentration is that much greater than the spike added, spike recoveries may not be accurate. The LCS indicates the digestion and analysis were in control.
2. The Aluminum RPD was > UCL. The samples were J flagged for positives.

4. Laboratory Control Sample All criteria were met.

5. Surrogates Not applicable.

6. Tuning and Mass Calibration Not applicable.

7. Internal Standard Not applicable.

8. Calibration Information

Initial Calibration Initial and CCBs were < the PQL. The ICAL met the 0.995 criteria for linear

regression.

Continuing Calibration All criteria were met.

9. Holding Time Holding times were met.

10. Summary

General Comments

- 1. Aluminum in the field duplicate pair exceeded the RPD and > 5 times the PQL criteria. The FD pair were flagged J for positives.
- 2. The Aluminum RPD was > UCL. The samples were J flagged for positives.
- 3. Potassium is listed in the case narrative as not meeting the acceptance criteria in the serial dilution for sample 7; however, it met criteria per the QAPP. The samples were J flagged by the lab and they were removed.

Data Package Completeness

- 1. The lab did not show 3 standards for the initial cal. on an AFCEE form. Put a call into Deb on 3/30/98 to request documentation. Deb returned call on 3/31/98 to state we need to use the raw data with the standards and correlations listed.
- 2. Requested gen chem and metals pages on 3/30/98 missing in the packages. Deb will fax ASAP. Received Fed-X on 4/8/98 after going to the incorrect address.
- 3. Lead in the method blank was reported incorrectly as a U. Changed to match the package.
- 4. Metals analyses were reported to the IDL and not the MDL. The RL and MDL values were identical as listed in the Edata.

Forms Review/ Items of Interest

Potassium is listed in the case narrative as not meeting the acceptance criteria in the serial dilution for sample 7; however, it met criteria per the QAPP. The samples were J flagged by the lab and they were removed.

COC Review Complete

6521178

9712185 SW6010A

Page 4 of 7

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA063	ALUMINUM	120	F	F	44.2	44.2	UG/L	
	CALCIUM	149000			38.5	38.5	UG/L	
	IRON	3890			15.3	15.3	UG/L	
	LEAD	0.7	U	U	0.7	0.7	UG/L	
	MAGNESIUM	9190			21.4	21.4	UG/L	
	POTASSIUM	1370	F	F	40.9	40.9	UG/L	
	SODIUM	122000			93.4	93.4	UG/L	ReplaceJF
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA064	ALUMINUM	44.2	U	U	44.2	44.2	- UG/L	
	CALCIUM	114000			38.5	38.5	UG/L	
	IRON	242			15.3	15.3	UG/L	
	LEAD	0.7	U	U	0.7	0.7	UG/L	
	MAGNESIUM	12400			21.4	21.4	UG/L	
	POTASSIUM	2040	F	F	40.9	40.9	UG/L	
	SODIUM	99800			46.7	46.7	- UG/L	ReplaceJF
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA065	ALUMINUM	1190	J		44.2	44.2	UG/L	MSRPC
	CALCIUM	96100			38.5	38.5	UG/L	
	IRON	2170			15.3	15.3	UG/L	
	LEAD	4	F	F	0.7	0.7	UG/L	
	MAGNESIUM	11000			21.4	21.4	UG/L	
	POTASSIUM	3300	F	F	40.9	40.9	UG/L	
	SODIUM	27500			46.7	46.7	UG/L	ReplaceJF
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA066	ALUMINUM	1050	J		44.2	44.2	UG/L	FD>RPI
	ALUMINUM	1050	J		44.2	44.2	UG/L	MSRPC
	CALCIUM	170000			38.5	38.5	UG/L	
	IRON	1370			15.3	15.3	UG/L	
	LEAD	0.7	U	U	0.7	0.7	UG/L	
	MAGNESIUM	28200			21.4	21.4	UG/L	
	POTASSIUM	2530	F	F	40.9	40.9	UG/L	
	SODIUM	95300			93.4	93.4	UG/L	ReplaceJF
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA067	ALUMINUM	44.2	U	U	44.2	44.2	UG/L	
	CALCIUM	926000			3850	3850	UG/L	
	IRON	108			15.3	15.3	UG/L	
	LEAD	0.7	U	U	0.7	0.7	UG/L	
	MAGNESIUM	57000			21.4	21.4	UG/L	
	POTASSIUM	20600			40.9	40.9	UG/L	ReplaceJF

Q1 12

6521179

9712185 SW6010A

Page 5 of 7

	SODIUM	1090000		4670	4670	UG/L		
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA068	ALUMINUM	358	F	F	44.2	44.2	UG/L	
	CALCIUM	89800			38.5	38.5	UG/L	
	IRON	649			15.3	15.3	UG/L	
	LEAD	0.7	U	U	0.7	0.7	UG/L	
	MAGNESIUM	2900			21.4	21.4	UG/L	
	POTASSIUM	1200	F	F	40.9	40.9	UG/L	ReplaceJF
	SODIUM	2930			46.7	46.7	UG/L	
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA069FD1	ALUMINUM	852	J		44.2	44.2	UG/L	FD>RPI
	ALUMINUM	852	J		44.2	44.2	UG/L	MSRPC
	CALCIUM	154000			38.5	38.5	UG/L	
	IRON	1220			15.3	15.3	UG/L	
	LEAD	0.7	U	U	0.7	0.7	UG/L	
	MAGNESIUM	28200			21.4	21.4	UG/L	
	POTASSIUM	2720	F	F	40.9	40.9	UG/L	ReplaceJF
	SODIUM	96600			46.7	46.7	UG/L	

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not requested
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

sur<LCL	Surrogate recovery less than lower limit
— Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

NAS FW JRB AOC 2**Data Quality Evaluation**
CH2MHILL**SDG 9712185****Method E310.1****Reviewer nh****Date 3/30/98****Matrix water**

Senior Review Vito D'Aurora

Field Samples Detects reported > the RL.

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
-----------------	------------------	-----------------	------------------	-----------------	------------------

Water

AHA062EB1	EB	AHA063	N	AHA064	N
AHA065	N	AHA066	N	AHA067	N
AHA068	N	AHA069FD1	FD		

**1. Case Narrative
Items of Interest** Nothing to note. Screening method.**2. Blank Summary****Field Blanks** Alkalinity not detected > the RL.**Method Blanks** Alkalinity not detected > the RL.**3. Spikes and Duplicates****Field Duplicates** Alkalinity reported > the RL. The RPD met criteria.**Laboratory Duplicates** In-house criteria met for duplicate.

6521183

9712185 E310.1

Page 2 of 6

Matrix Spike None.

4. Laboratory Control Sample In-house acceptance criteria met.

5. Surrogates Not applicable.

6. Tuning and Mass
Calibration Not applicable.

7. Internal Standard Not applicable.

8. Calibration Information

Initial Calibration Not in package.

- Continuing Calibration Not in package.

9. Holding Time Holding times were met.

10. Summary

General Comments Screening method. Reviewed data to the in-house acceptance criteria. Field duplicate criteria provided in the QAPP only. Flagged the data with an S.

Data Package Completeness Screening method. Reviewed data to the in-house acceptance criteria. Detection limit (MDL) and RL are the same.

6521184

9712185 E310.1

Page 3 of 6

**Forms Review/ Items of
Interest** High results > the RL. Screening method.

COC Review Complete

6521185

9712185 E310.1

Page 4 of 6

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA063	TOTAL ALKALINITY	440	S		50	50	MG/L	screen
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA064	TOTAL ALKALINITY	380	S		50	50	MG/L	screen
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA065	TOTAL ALKALINITY	240	S		50	50	MG/L	screen
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA066	TOTAL ALKALINITY	500	S		50	50	MG/L	screen
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA067	TOTAL ALKALINITY	330	S		50	50	MG/L	screen
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA068	TOTAL ALKALINITY	240	S		50	50	MG/L	screen
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA069FD1	TOTAL ALKALINITY	510	S		50	50	MG/L	screen

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D critera
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlocal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

6521187

9712185 E310.1

Page 6 of 6

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISFlag	Lab R flag removed; Re-analysis confirmed*matnx effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D critena
ReplaceJFlag	Lab J flag removed - Senal Dilution compound within critena

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matnx effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

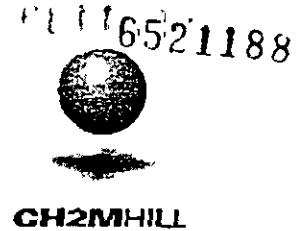
exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC critena issues without flagging.

6521188

NAS FW JRB AOC 2

Data Quality Evaluation



SDG 9712185

Method SW9056

Reviewer nh

Date 3/30/98

Matrix water

Senior Review Vito D'Aurora

Field Samples

1. The concentration of dissolved constituents in sample AHA067 was quite high; therefore, it was necessary to dilute this sample five fold prior to injection into the ion chromatograph. Chloride analysis was diluted between 5 to 500 and the Sulfate analysis was diluted between 5 and 200.

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
-----------------	------------------	-----------------	------------------	-----------------	------------------

Water

AHA062EB1	EB	AHA063	N	AHA064	N
AHA065	N	AHA066	N	AHA066MS1	MS
AHA066SD1	SD	AHA067	N	AHA068	N
AHA069FD1	FD				

1. Case Narrative Items of Interest

1. The concentration of dissolved constituents in sample AHA067 was quite high; therefore, it was necessary to dilute this sample five fold prior to injection into the ion chromatograph.
2. The MSD recovery for Orthophosphate exceeded acceptance limits due to matrix effect.

2. Blank Summary

Field Blanks All criteria were met.

Method Blanks No analytes detected > RL.

6521189

9712185 SW9056

Page 2 of 7

3. Spikes and Duplicates

Field Duplicates All criteria were met.

Laboratory Duplicates None

Matrix Spike The MSD recovery for Orthophosphate exceeded acceptance limits due to matrix effect. The samples were flagged J for positives.

4. Laboratory Control Sample In-house acceptance criteria met.

5. Surrogates Not applicable.

6. Tuning and Mass Calibration Not applicable.

7. Internal Standard Not applicable.

8. Calibration Information

Initial Calibration Internal criteria met. No correlation coefficient found to validate.

Continuing Calibration All analytes within 10% of expected value.

9. Holding Time Holding times were exceeded by 1 day for the Nitrate analysis. The samples were flagged J and UJ.

ENR 10-18

6521190

0. Summary

- General Comments**
1. Holding times were exceeded by 1 day for the Nitrate analysis. The samples were flagged J and UJ.
 2. The MSD recovery for Orthophosphate exceeded acceptance limits due to matrix effect. The samples were flagged J for positives.

Data Package Completeness

1. Missing pages throughout the Gen Chem fraction. No Form 2, MS/MSD or LCS forms provided for the Orthophosphate analysis except for a summary form. Left message for Deb 3/30/98. Spoke to Deb on 3/31/98 re: the missing pages in the packages. Deb will fax ASAP. Received Fed-X on 4/8/98 after going to the incorrect address.
2. Still missing OPO4 Form 1. Spoke with Lori on 4/14/98. Received fax on 4/15/98.
3. Detection limit (MDL) and RL are the same.

Forms Review/ Items of Interest

All analyses reported hits > the RL except for Nitrite.

COC Review

Complete.

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA063	BROMIDE	1.2			0.1	0.1	MG/L	
	CHLORIDE	120			4	4	MG/L	
	FLUORIDE	0.5			0.2	0.2	MG/L	
	NITRATE	4.8	J		0.1	0.1	MG/L	HT>UCI
	NITRITE	0.4	U	U	0.4	0.4	MG/L	
	ORTHOPHOSPHATE	0.1	U	U	0.1	0.1	MG/L	
	SULFATE	65			4	4	MG/L	
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA064	BROMIDE	1			0.1	0.1	MG/L	
	CHLORIDE	94			4	4	MG/L	
	FLUORIDE	0.7			0.2	0.2	MG/L	
	NITRATE	3.9	J		0.1	0.1	MG/L	HT>UCI
	NITRITE	0.4	U	U	0.4	0.4	MG/L	
	ORTHOPHOSPHATE	0.1	U	U	0.1	0.1	MG/L	
	SULFATE	70			4	4	MG/L	
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA065	BROMIDE	0.5			0.1	0.1	MG/L	
	CHLORIDE	22			1	1	MG/L	
	FLUORIDE	0.4			0.2	0.2	MG/L	
	NITRATE	4.7	J		0.1	0.1	MG/L	HT>UCI
	NITRITE	0.4	U	U	0.4	0.4	MG/L	
	ORTHOPHOSPHATE	0.1	U	U	0.1	0.1	MG/L	
	SULFATE	56			1	1	MG/L	
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA066	BROMIDE	1.42			0.1	0.1	MG/L	
	CHLORIDE	76			10	10	MG/L	
	FLUORIDE	1.66			0.2	0.2	MG/L	
	NITRATE	0.1	UJ	U	0.1	0.1	MG/L	HT>UCI
	NITRITE	0.4	U	U	0.4	0.4	MG/L	
	ORTHOPHOSPHATE	0.1	U	U	0.1	0.1	MG/L	
	SULFATE	120			10	10	MG/L	
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA067	BROMIDE	8.6			0.5	0.5	MG/L	
	CHLORIDE	2600			100	100	MG/L	
	FLUORIDE	6.4			1	1	MG/L	
	NITRATE	0.5	UJ	U	0.5	0.5	MG/L	HT>UCI
	NITRITE	2	U	U	2	2	MG/L	
	ORTHOPHOSPHATE	2.6	J		0.5	0.5	MG/L	SD%R
	SULFATE	1600			40	40	MG/L	

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA068	BROMIDE	0.1	U	U	0.1	0.1	MG/L	
	CHLORIDE	1.2			0.2	0.2	MG/L	
	FLUORIDE	0.3			0.2	0.2	MG/L	
	NITRATE	0.1	UJ	U	0.1	0.1	MG/L	HT>UCI
	NITRITE	0.4	U	U	0.4	0.4	MG/L	
	ORTHOPHOSPHATE	0.1	J		0.1	0.1	MG/L	SD%R
	SULFATE	4.2			0.2	0.2	MG/L	
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA069FD1	BROMIDE	1.3			0.1	0.1	MG/L	
	CHLORIDE	67			4	4	MG/L	
	FLUORIDE	1.8			0.2	0.2	MG/L	
	NITRATE	0.1	UJ	U	0.1	0.1	MG/L	HT>UCI
	NITRITE	0.4	U	U	0.4	0.4	MG/L	
	ORTHOPHOSPHATE	0.1	U	U	0.1	0.1	MG/L	
	SULFATE	110			4	4	MG/L	

Validation Flag Abbreviations

Abbreviation	Validation Reason
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	- Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatnx	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

Sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISFlag	Lab R flag removed; Re-analysis confirmed-matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

NAS FW JRB AOC 2

6521195


Data Quality Evaluation

CH2MHILL

SDG 9712202 Method SW9060
Reviewer nh Date 3/30/98 Matrix water

Senior Review Vito D'Aurora

Field Samples Samples 3 and 4 reported detects > the RL.

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
-----------------	------------------	-----------------	------------------	-----------------	------------------

Water

AHA071EB1	EB	AHA072	N	AHA073FD1	FD
AHA075	N				

1. Case Narrative
Items of Interest 1. All reagent blanks were < the RL.

2. Blank Summary

Field Blanks Total Organic Carbon was not detected in the equipment blank.

Method Blanks All reagent blanks were < the RL.

3. Spikes and Duplicates

Field Duplicates The RPD value exceeded the UT and the pair of samples were marked J.

<u>Analyte</u>	<u>Normal Sample</u>	<u>Result</u>	<u>Field Dupe</u>	<u>Result</u>	<u>RPD</u>	<u>Criteria</u>	<u>Matrix</u>
TOTAL ORGANIC C	AHA072	4.4	AHA073FD1	3.1	34.67	0	WATER

Laboratory Duplicates All RPD criteria were met.

6521196

9712202 SW9060

Page 2 of 6

Matrix Spike All criteria were met.

4. Laboratory Control Sample None

5. Surrogates Not applicable.

6. Tuning and Mass Calibration Not applicable.

7. Internal Standard Not applicable.

8. Calibration Information

Initial Calibration All criteria were met.

Continuing Calibration All criteria were met.

9. Holding Time Holding times were met.

10. Summary

General Comments The RPD value exceeded the UT and the pair of samples were marked J.

Data Package Completeness 1. No LCS provided.
2. The RL and MDL values were identical as listed in the Edata.

Forms Review/ Items of Interest Samples 3 and 4 reported detects > the RL.

COLL
6521197

9712202 SW9060

Page 3 of 6

COC Review Complete.

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA072	TOTAL ORGANIC CARBON	4.4	J		I	I	MG/L	FD>RPI
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA073FD1	TOTAL ORGANIC CARBON	3.1	J		I	I	MG/L	FD>RPI
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA075	TOTAL ORGANIC CARBON	I	U	U	I	I	MG/L	

Validation Flag Abbreviations

Abbreviation	Validation Reason
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlocal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.



CH2MHILL

SDG 9712202

Method SW8260A

Reviewer nh

Date 3/30/98

Matrix water

Senior Review Vito D'Aurora

Field Samples

1. Due to high levels of target analytes, samples were analyzed at a higher dilution.

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
-----------------	------------------	-----------------	------------------	-----------------	------------------

Water

AHA070TB1	TB	AHA071EB1	EB	AHA072	N
AHA073FD1	FD	AHA074	N	AHA075	N
AHA076	N	AHA077	N	AHA078	N
LABQC	BD				

**1. Case Narrative
Items of Interest**

1. Methylene Chloride was detected > the reporting limit in the method blank. This compound was detected < the calculated value, so the data were flagged U (by the lab).
2. The LCS/LCD from 12/23/97 were outside the CL for eight compounds. With the exception of Trichloroethene and Methylene Chloride, the other compounds were not detected in the samples; therefore, the data are not affected.
3. Trichloroethene was within QC limits for the MS/MSD; therefore, data were not affected by this compound's high recovery in the LCD. The recovery exceeded the UCL by 2%.
4. The MS/MSD were performed with SDG 9712185. Sixteen compounds did not meet criteria. With the exception of Trichlorofluoromethane and Methylene Chloride, the recoveries of most of these compounds in the LCS/LCD were within CL, which demonstrated the spike outliers in the matrix spikes were due to matrix effects, so no further action is needed.
5. Due to high levels of target analytes, samples were analyzed at a higher dilution.
6. Several compounds from the ICV/CCV order curve were within the acceptance limit but exceeded the 15% RSD criteria. These were quantitated using the average response factor due to software problem.

2. Blank Summary

Field Blanks Chloroform was detected above the RL in the Trip blank; however, the samples were below the calculated value and were all non-detects. No flagging necessary.

Method Blanks 1. Methylene Chloride was detected > the reporting limit in the method blanks. This compound was detected < the calculated value, so the data were flagged U (by the lab). No flagging necessary.

<u>Blank Type</u>	<u>Blank ID</u>	<u>Analyte</u>	<u>Result</u>	<u>ReportLimit</u>	<u>LabFlag</u>	<u>Units</u>
LB	LABQC	METHYLENE CHLORI	0.86	0.21		UG/L
TB	AHA070TB1	CHLOROFORM	0.74	0.15		UG/L
LB	LABQC	METHYLENE CHLORI	0.44	0.21		UG/L

3. Spikes and Duplicates

Field Duplicates All criteria were met.

Laboratory Duplicates None

Matrix Spike 1. The MS/MSD were performed with SDG 9712185.

4. Laboratory Control Sample

1. The LCS/LCD from 12/23/97 were outside the CL for nine compounds. With the exception of Trichloroethene and m,p-xylene, the other compounds were not detected in the samples. The non-detects were flagged none and the detects were flagged J for exceeding the UCL. Methylene Chloride which exceeded the LCL was flagged R for non-detects.
2. The LCS/LCD from 12/26/97 met criteria.

<u>Matrix</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>Analyte</u>	<u>Recovery</u>	<u>LowerLimit</u>	<u>UpperLimit</u>
WATER	BS	LABQC	1,2-DICHLOROETHANE	136	68	127
WATER	BS	LABQC	1,2-DICHLOROPROPANE	128	70	125
WATER	BS	LABQC	CHLOROETHANE	126	65	125
WATER	BS	LABQC	DIBROMOMETHANE	128	69	127
WATER	BS	LABQC	M,P-XYLENE	137	75	125
WATER	BS	LABQC	METHYLENE CHLORIDE	59	75	125
WATER	BS	LABQC	TRICHLOROFLUOROMETH	131	67	125
WATER	BD	LABQC	1,2-DICHLOROETHANE	133	68	127
WATER	BD	LABQC	M,P-XYLENE	138	75	125
WATER	BD	LABQC	METHYLENE CHLORIDE	59	75	125
WATER	BD	LABQC	TRANS-1,3-DICHLOROPRO	126	66	125
WATER	BD	LABQC	TRICHLOROETHENE	127	71	125
WATER	BD	LABQC	TRICHLOROFLUOROMETH	126	67	125

6521203

5. Surrogates All criteria were met.

6. Tuning and Mass Calibration All criteria met.

7. Internal Standard All internal standard recoveries were within acceptance criteria.

8. Calibration Information

Initial Calibration

- 1. Methylene Chloride, Naphthalene, 1,1-DCE and 1,2,3-Trichlorobenzene exceeded the %RSD criteria in the ICAL from 12/11/97. The applicable samples were flagged R.
- 2. Methylene Chloride exceeded the %RSD criteria in the ICAL from 12/29/97. No flagging applied since samples 1 and 2 were field blanks.

<u>Field ID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation Reason</u>
AHA072	1,1-DICHLOROETHENE	R	IC%RSD
AHA073FD1	1,1-DICHLOROETHENE	R	IC%RSD
AHA074	1,1-DICHLOROETHENE	R	IC%RSD
AHA075	1,1-DICHLOROETHENE	R	IC%RSD
AHA076	1,1-DICHLOROETHENE	R	IC%RSD
AHA077	1,1-DICHLOROETHENE	R	IC%RSD
AHA078	1,1-DICHLOROETHENE	R	IC%RSD
AHA072	1,2,3-TRICHLOROBENZENE	R	IC%RSD
AHA073FD1	1,2,3-TRICHLOROBENZENE	R	IC%RSD
AHA074	1,2,3-TRICHLOROBENZENE	R	IC%RSD
AHA075	1,2,3-TRICHLOROBENZENE	R	IC%RSD
AHA076	1,2,3-TRICHLOROBENZENE	R	IC%RSD
AHA077	1,2,3-TRICHLOROBENZENE	R	IC%RSD
AHA078	1,2,3-TRICHLOROBENZENE	R	IC%RSD
AHA072	METHYLENE CHLORIDE	R	IC%RSD
AHA073FD1	METHYLENE CHLORIDE	R	IC%RSD
AHA074	METHYLENE CHLORIDE	R	IC%RSD
AHA075	METHYLENE CHLORIDE	R	IC%RSD
AHA076	METHYLENE CHLORIDE	R	IC%RSD
AHA077	METHYLENE CHLORIDE	R	IC%RSD
AHA078	METHYLENE CHLORIDE	R	IC%RSD
AHA072	NAPHTHALENE	R	IC%RSD
AHA073FD1	NAPHTHALENE	R	IC%RSD
AHA074	NAPHTHALENE	R	IC%RSD
AHA075	NAPHTHALENE	R	IC%RSD
AHA076	NAPHTHALENE	R	IC%RSD

6521204

9712202 SW8260A

Page 4 of 17

AHA077	NAPHTHALENE	R	IC%RSD
AHA078	NAPHTHALENE	R	IC%RSD

Continuing Calibration

1. Methylene Chloride exceeded the %RSD from the CCV of 12/23/97. The applicable samples were flagged R.

2. Seven compounds were missing from the 12/11/97 water 2nd source CCV and two compounds fell outside the expected value. The seven analytes were flagged R in the samples and 1,1-dichloroethene and Methylene Chloride were flagged R for exceeding 25% of expected value.

3. Seven compounds were missing from the second source CCV from 12/26/97. Methylene Chloride in the exceeded 25% of the expected value. No action necessary due to field samples.

Field ID	Lab sample ID	Analyte	Validation Flag	Validation
AHA072	9712202-3	1-CHLOROHEXANE	R	CCVMiss
AHA072	9712202-3	BROMOMETHANE	R	CCVMiss
AHA072	9712202-3	CHLOROETHANE	R	CCVMiss
AHA072	9712202-3	CHLOROMETHANE	R	CCVMiss
AHA072	9712202-3	1,1-CHLORODIFLUOROMETHANE	R	CCVMiss
AHA072	9712202-3	METHYLENE CHLORIDE	R	CV%D
AHA072	9712202-3	1,1,1-TRICHLOROFUOROMETHANE	R	CCVMiss
AHA072	9712202-3	VINYL CHLORIDE	R	CCVMiss
AHA073FD1	9712202-4	1-CHLOROHEXANE	R	CCVMiss
AHA073FD1	9712202-4	BROMOMETHANE	R	CCVMiss
AHA073FD1	9712202-4	CHLOROETHANE	R	CCVMiss
AHA073FD1	9712202-4	CHLOROMETHANE	R	CCVMiss
AHA073FD1	9712202-4	1,1-CHLORODIFLUOROMETHANE	R	CCVMiss
AHA073FD1	9712202-4	METHYLENE CHLORIDE	R	CV%D
AHA073FD1	9712202-4	1,1,1-TRICHLOROFUOROMETHANE	R	CCVMiss
AHA073FD1	9712202-4	VINYL CHLORIDE	R	CCVMiss
AHA074	9712202-5	1-CHLOROHEXANE	R	CCVMiss
AHA074	9712202-5	BROMOMETHANE	R	CCVMiss
AHA074	9712202-5	CHLOROETHANE	R	CCVMiss
AHA074	9712202-5	CHLOROMETHANE	R	CCVMiss
AHA074	9712202-5	1,1-CHLORODIFLUOROMETHANE	R	CCVMiss
AHA074	9712202-5	METHYLENE CHLORIDE	R	CV%D
AHA074	9712202-5	1,1,1-TRICHLOROFUOROMETHANE	R	CCVMiss
AHA074	9712202-5	VINYL CHLORIDE	R	CCVMiss
AHA075	9712202-6	1-CHLOROHEXANE	R	CCVMiss
AHA075	9712202-6	BROMOMETHANE	R	CCVMiss
AHA075	9712202-6	CHLOROETHANE	R	CCVMiss
AHA075	9712202-6	CHLOROMETHANE	R	CCVMiss
AHA075	9712202-6	1,1-CHLORODIFLUOROMETHANE	R	CCVMiss
AHA075	9712202-6	METHYLENE CHLORIDE	R	CV%D
AHA075	9712202-6	1,1,1-TRICHLOROFUOROMETHANE	R	CCVMiss
AHA075	9712202-6	VINYL CHLORIDE	R	CCVMiss

AHA076	9712202-7	1-CHLOROHEXANE	R	CCVMiss
AHA076	9712202-7	BROMOMETHANE	R	CCVMiss
AHA076	9712202-7	CHLOROETHANE	R	CCVMiss
AHA076	9712202-7	CHLOROMETHANE	R	CCVMiss
AHA076	9712202-7	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA076	9712202-7	METHYLENE CHLORIDE	R	CV%D
AHA076	9712202-7	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA076	9712202-7	VINYL CHLORIDE	R	CCVMiss
AHA077	9712202-8	1-CHLOROHEXANE	R	CCVMiss
AHA077	9712202-8	BROMOMETHANE	R	CCVMiss
AHA077	9712202-8	CHLOROETHANE	R	CCVMiss
AHA077	9712202-8	CHLOROMETHANE	R	CCVMiss
AHA077	9712202-8	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA077	9712202-8	METHYLENE CHLORIDE	R	CV%D
AHA077	9712202-8	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA077	9712202-8	VINYL CHLORIDE	R	CCVMiss
AHA078	9712202-9	1-CHLOROHEXANE	R	CCVMiss
AHA078	9712202-9	BROMOMETHANE	R	CCVMiss
AHA078	9712202-9	CHLOROETHANE	R	CCVMiss
AHA078	9712202-9	CHLOROMETHANE	R	CCVMiss
AHA078	9712202-9	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA078	9712202-9	METHYLENE CHLORIDE	R	CV%D
AHA078	9712202-9	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA078	9712202-9	VINYL CHLORIDE	R	CCVMiss

9. Holding Time

Holding times were met.

10. Summary

- General Comments**
1. The LCS/LCD from 12/23/97 were outside the CL for nine compounds. With the exception of Trichloroethene and m,p-xylene, the other compounds were not detected in the samples. The non-detects were flagged none and the detects were flagged J for exceeding the UCL. Methylene Chloride which exceeded the LCL was flagged R for non-detects.
 2. Methylene Chloride, Naphthalene, 1,1-DCE and 1,2,3-Trichlorobenzene exceeded the %RSD criteria in the ICAL from 12/11/97. The applicable samples were flagged R.
 3. Methylene Chloride exceeded the %RSD from the CCV of 12/23/97. The applicable samples were flagged R.
 3. Seven compounds were missing from the 12/11/97 water 2nd source CCV and two compounds fell outside the expected value. The seven analytes were flagged R in the samples and 1,1-dichloroethene and Methylene Chloride were flagged R for exceeding 25% of expected value.

- Data Package Completeness**
1. Edata did not include labqc from 12/23/97. Added this from another package 9712185.
 2. The case narrative did not follow the package contents.

6521206

9712202 SW8260A

Page 6 of 17

**Forms Review/ Items of
Interest**

High hits of Trichloroethene in the samples.

COC Review

**The soil TOC analysis will come in another SDG from RECRA Labnet
incorporated into a Paragon package.**

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA072	1,1,1,2-TETRACHLOROETHANE	13	U	U	3.7	13	UG/L	
	1,1,1-TRICHLOROETHANE	20	U	U	3.25	20	UG/L	
	1,1,2,2-TETRACHLOROETHANE	10	U	U	4.25	10	UG/L	
	1,1,2-TRICHLOROETHANE	25	U	U	4	25	UG/L	
	1,1-DICHLOROETHANE	10	U	U	2.75	10	UG/L	
	1,1-DICHLOROETHENE	30	R	U	3.75	30	UG/L	IC%RSI
	1,1-DICHLOROPROPENE	25	U	U	3.5	25	UG/L	
	1,2,3-TRICHLOROBENZENE	7.5	R	U	3.75	7.5	UG/L	IC%RSI
	1,2,3-TRICHLOROPROPANE	80	U	U	3.75	80	UG/L	
	1,2,4-TRICHLOROBENZENE	10	U	U	3.25	10	UG/L	
	1,2,4-TRIMETHYLBENZENE	33	U	U	2.25	33	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	65	U	U	6.25	65	UG/L	
	1,2-DIBROMOETHANE	15	—	U	4.75	15	UG/L	
	1,2-DIECHLOROBENZENE	7.5	U	U	2.5	7.5	UG/L	
	1,3,5-TRIMETHYLBENZENE	13	U	U	2.5	13	UG/L	
	1,3-DICHLOROBENZENE	30	U	U	1.25	30	UG/L	
	1,3-DICHLOROPROPANE	10	U	U	3.75	10	UG/L	
	1,4-DICHLOROBENZENE	7.5	U	U	3	7.5	UG/L	
	1-CHLOROHEXANE	13	R	U	3.5	13	UG/L	CCVMissi
	2,2-DICHLOROPROPANE	88	U	U	8	88	UG/L	
	2-CHLOROTOLUENE	10	U	U	2.5	10	UG/L	
	4-BROMOFLUOROBENZENE	98	—	—	2.5	2.5	ERCEN	
	4-CHLOROTOLUENE	15	U	U	2	15	UG/L	
	BENZENE	10	U	U	2.5	10	UG/L	
	BROMOBENZENE	7.5	U	U	2.25	7.5	UG/L	
	BROMOCHLOROMETHANE	10	U	U	4.5	10	UG/L	
	BROMODICHLOROMETHANE	20	U	U	2.5	20	UG/L	
	BROMOFORM	30	U	U	4.5	30	UG/L	
	BROMOMETHANE	28	R	U	5	28	UG/L	CCVMissi
	CARBON TETRACHLORIDE	53	U	U	4	53	UG/L	
	CHLOROBENZENE	10	U	U	3	10	UG/L	
	CHLOROETHANE	25	R	U	7.5	25	UG/L	CCVMissi
	CHLOROFORM	7.5	U	U	3.75	7.5	UG/L	
	CHLOROMETHANE	33	R	U	2.25	33	UG/L	CCVMissi
	CIS-1,2-DICHLOROETHENE	30	U	U	2	30	UG/L	
	CIS-1,3-DICHLOROPROPENE	25	U	U	2.75	25	UG/L	
	DIBROMOCHLOROMETHANE	13	U	U	4	13	UG/L	
	DIBROMOFLUOROMETHANE	106	—	—	2.5	2.5	ERCEN	
	DICHLORODIFLUOROMETHANI	25	R	U	9	25	UG/L	CCVMissi
	ETHYLBENZENE	15	U	U	3	15	UG/L	
	HEXAChLOROBUTADIENE	28	U	U	5	28	UG/L	
	ISOPROPYLBENZENE	13	U	U	3.25	13	UG/L	
	METHYLENE CHLORIDE	10	R	U	5.25	7.5	UG/L	CV%D
	METHYLENE CHLORIDE	10	R	U	5.25	7.5	UG/L	IC%RSI
	METHYLENE CHLORIDE	10	R	U	5.25	7.5	UG/L	BS%R
	METHYLENE CHLORIDE	10	R	U	5.25	7.5	UG/L	BD%R
	N-BUTYLBENZENE	28	U	U	2.75	28	UG/L	

6521208

9712202 SW8260A

Page 8 of 17

N-PROPYLBENZENE	10	U	U	2.25	10	UG/L	
NAPHTHALENE	10	R	U	3	10	UG/L	IC%RSI
O-XYLENE	28	U	U	3.25	28	UG/L	
P-ISOPROPYLTOLUENE	30	U	U	2.25	30	UG/L	
SEC-BUTYLBENZENE	33	U	U	3	33	UG/L	
STYRENE	10	U	U	3	10	UG/L	
TERT-BUTYLBENZENE	35	U	U	3.25	35	UG/L	
TETRACHLOROETHENE	35	U	U	4.25	35	UG/L	
TOLUENE	28	U	U	3.5	28	UG/L	
TOLUENE-D8	109	-	-	2.5	2.5	ERCEN	
TRANS-1,2-DICHLOROETHENE	15	U	U	2.25	15	UG/L	
TRICHLOROETHENE	400	J	-	2.5	25	UG/L	BD%R
TRICHLOROFLUOROMETHANE	20	R	U	5.5	20	UG/L	CCVMissi
VINYL CHLORIDE	28	R	U	4	28	UG/L	CCVMissi

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA073FD1	1,1,1,2-TETRACHLOROETHANE	13	U	U	3.7	13	UG/L	
	1,1,1-TRICHLOROETHANE	20	U	U	3.25	20	UG/L	
	1,1,2,2-TETRACHLOROETHANE	10	U	U	4.25	10	UG/L	
	1,1,2-TRICHLOROETHANE	25	U	U	4	25	UG/L	
	1,1-DICHLOROETHANE	10	U	U	2.75	10	UG/L	
	1,1-DICHLOROETHENE	30	R	U	3.75	30	UG/L	IC%RSI
	1,1-DICHLOROPROPENE	25	U	U	3.5	25	UG/L	
	1,2,3-TRICHLOROBENZENE	7.5	R	U	3.75	7.5	UG/L	IC%RSI
	1,2,3-TRICHLOROPROPANE	80	U	U	3.75	80	UG/L	
	1,2,4-TRICHLOROBENZENE	10	U	U	3.25	10	UG/L	
	1,2,4-TRIMETHYLBENZENE	33	U	U	2.25	33	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	65	U	U	6.25	65	UG/L	
	1,2-DIBROMOETHANE	15	U	U	4.75	15	UG/L	
	1,2-DICHLOROBENZENE	7.5	U	U	2.5	7.5	UG/L	
	1,3,5-TRIMETHYLBENZENE	13	U	U	2.5	13	UG/L	
	1,3-DICHLOROBENZENE	30	U	U	1.25	30	UG/L	
	1,3-DICHLOROPROPANE	10	U	U	3.75	10	UG/L	
	1,4-DICHLOROBENZENE	7.5	U	U	3	7.5	UG/L	
	1-CHLOROHEXANE	13	R	U	3.5	13	UG/L	CCVMissi
	2,2-DICHLOROPROPANE	88	U	U	8	88	UG/L	
	2-CHLORTOLUENE	10	U	U	2.5	10	UG/L	
	4-BROMOFLUOROBENZENE	100	-	-	2.5	2.5	ERCEN	
	4-CHLOROTOLUENE	15	U	U	2	15	UG/L	
	BENZENE	10	U	U	2.5	10	UG/L	
	BROMOBENZENE	7.5	U	U	2.25	7.5	UG/L	
	BROMOCHLOROMETHANE	10	U	U	4.5	10	UG/L	
	BROMODICHLOROMETHANE	20	U	U	2.5	20	UG/L	
	BROMOFORM	30	U	U	4.5	30	UG/L	
	BROMOMETHANE	28	R	U	5	28	UG/L	CCVMissi
	CARBON TETRACHLORIDE	53	U	U	4	53	UG/L	
	CHLOROBENZENE	10	U	U	3	10	UG/L	
	CHLOROETHANE	25	R	U	7.5	25	UG/L	CCVMissi
	CHLOROFORM	7.5	U	U	3.75	7.5	UG/L	
	CHLOROMETHANE	33	R	U	2.25	33	UG/L	CCVMissi
	CIS-1,2-DICHLOROETHENE	30	U	U	2	30	UG/L	
	CIS-1,3-DICHLOROPROPENE	25	U	U	2.75	25	UG/L	
	DIBROMOCHLOROMETHANE	13	U	U	4	13	UG/L	
	DIBROMOFLUOROMETHANE	103	-	-	2.5	2.5	ERCEN	
	DICHLORODIFLUOROMETHANE	25	R	U	9	25	UG/L	CCVMissi

ETHYLBENZENE	15	U	U	3	15	UG/L	
HEXACHLOROBUTADIENE	28	U	U	5	28	UG/L	
ISOPROPYLBENZENE	13	U	U	3.25	13	UG/L	
METHYLENE CHLORIDE	9	R	U	5.25	7.5	UG/L	BD%R
METHYLENE CHLORIDE	9	R	U	5.25	7.5	UG/L	BS%R
METHYLENE CHLORIDE	9	R	U	5.25	7.5	UG/L	CV%D
METHYLENE CHLORIDE	9	R	U	5.25	7.5	UG/L	IC%RSI
N-BUTYLBENZENE	28	U	U	2.75	28	UG/L	
N-PROPYLBENZENE	10	U	U	2.25	10	UG/L	
NAPHTHALENE	10	R	U	3	10	UG/L	IC%RSI
O-XYLENE	28	U	U	3.25	28	UG/L	
P-ISOPROPYLtolUENE	30	U	U	2.25	30	UG/L	
SEC-BUTYLBENZENE	33	U	U	3	33	UG/L	
STYRENE	10	U	U	3	10	UG/L	
TERT-BUTYLBENZENE	35	U	U	3.25	35	UG/L	
TETRACHLOROETHENE	35	U	U	4.25	35	UG/L	
TOLUENE	28	U	U	3.5	28	UG/L	
TOLUENE-D8	106			2.5	2.5	ERCEN	
TRANS-1,2-DICHLOROETHENE	15	U	U	2.25	15	UG/L	
TRICHLOROETHENE	400	J		2.5	25	UG/L	BD%R
TRICHLOROFLUOROMETHANE	20	R	U	5.5	20	UG/L	CCVMiss
VINYL CHLORIDE	28	R	U	4	28	UG/L	CCVMiss

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA074	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.148	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	U	U	0.16	1	UG/L	
	1,1-DICHLOROETHANE	0.4	U	U	0.11	0.4	UG/L	
	1,1-DICHLOROETHENE	1.2	R	U	0.15	1.2	UG/L	IC%RSI
	1,1-DICHLOROPROPENE	1	U	U	0.14	1	UG/L	
	1,2,3-TRICHLOROBENZENE	0.3	R	U	0.15	0.3	UG/L	IC%RSI
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	U	U	0.13	0.4	UG/L	
	1,2,4-TRIMETHYLBENZENE	1.3	U	U	0.09	1.3	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	2.6	U	U	0.25	2.6	UG/L	
	1,2-DIBROMOETHANE	0.6	U	U	0.19	0.6	UG/L	
	1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
	1,3,5-TRIMETHYLBENZENE	0.5	U	U	0.1	0.5	UG/L	
	1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
	1,3-DICHLOROPROPANE	0.4	U	U	0.15	0.4	UG/L	
	1,4-DICHLOROBENZENE	0.3	U	U	0.12	0.3	UG/L	
	1-CHLOROHEXANE	0.5	R	U	0.14	0.5	UG/L	CCVMiss
	2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L	
	2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	
	4-BROMOFLUOROBENZENE	106			0.1	0.1	ERCEN	
	4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L	
	BENZENE	0.4	U	U	0.1	0.4	UG/L	
	BROMOBENZENE	0.3	U	U	0.09	0.3	UG/L	
	BROMOCHLOROMETHANE	0.4	U	U	0.18	0.4	UG/L	
	BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L	
	BROMOFORM	1.2	U	U	0.18	1.2	UG/L	
	BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	CCVMiss
	CARBON TETRACHLORIDE	2.1	U	U	0.16	2.1	UG/L	
	CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	

6521210

9712202 SW8260A

Page 10 of 17

CHLOROETHANE	1	R	U	0.3	1	UG/L	CCVMissi
CHLOROFORM	0.3	U	U	0.15	0.3	UG/L	
CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	CCVMissi
CIS-1,2-DICHLOROETHENE	1.2	U	U	0.08	1.2	UG/L	
CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L	
DIBROMOCHLOROMETHANE	0.5	U	U	0.16	0.5	UG/L	
DIBROMOFLUOROMETHANE	102			0.1	0.1	ERCEN	
DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L	CCVMissi
ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L	
HEXACHLOROBUTADIENE	1.1	U	-	0.2	1.1	UG/L	
ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L	
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	IC%RSI
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BS%R
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	CV%D
N-BUTYLBENZENE	1.1	U	U	0.11	1.1	UG/L	BD%R
N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L	
NAPHTHALENE	0.4	R	U	0.12	0.4	UG/L	IC%RSI
O-XYLENE	1.1	U	U	0.13	1.1	UG/L	
P-ISOPROPYLTOLUENE	1.2	U	U	0.09	1.2	UG/L	
SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L	
STYRENE	0.4	U	U	0.12	0.4	UG/L	
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L	
TETRACHLOROETHENE	1.4	U	U	0.17	1.4	UG/L	
TOLUENE	1.1	U	U	0.14	1.1	UG/L	
TOLUENE-D8	108			0.1	0.1	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.6	U	U	0.09	0.6	UG/L	
TRICHLOROETHENE	3.8	J	-	0.1	1	UG/L	BD%R
TRICHLOROFLUOROMETHANE	0.8	R	U	0.22	0.8	UG/L	CCVMissi
VINYL CHLORIDE	1.1	R	U	0.16	1.1	UG/L	CCVMissi

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA075	1,1,1,2-TETRACHLOROETHANE	13	U	U	3.7	13	UG/L	
	1,1,1-TRICHLOROETHANE	20	U	U	3.25	20	UG/L	
	1,1,2,2-TETRACHLOROETHANE	10	U	U	4.25	10	UG/L	
	1,1,2-TRICHLOROETHANE	25	U	U	4	25	UG/L	
	1,1-DICHLOROETHANE	10	U	U	2.75	10	UG/L	
	1,1-DICHLOROETHENE	30	R	U	3.75	30	UG/L	IC%RSI
	1,1-DICHLOROPROPENE	25	U	U	3.5	25	UG/L	
	1,2,3-TRICHLOROBENZENE	7.5	R	U	3.75	7.5	UG/L	IC%RSI
	1,2,3-TRICHLOROPROPANE	80	U	U	3.75	80	UG/L	
	1,2,4-TRICHLOROBENZENE	10	U	U	3.25	10	UG/L	
	1,2,4-TRIMETHYLBENZENE	33	U	U	2.25	33	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	65	U	U	6.25	65	UG/L	
	1,2-DIBROMOETHANE	15	U	U	4.75	15	UG/L	
	1,2-DICHLOROBENZENE	7.5	U	U	2.5	7.5	UG/L	
	1,3,5-TRIMETHYLBENZENE	13	U	U	2.5	13	UG/L	
	1,3-DICHLOROBENZENE	30	U	U	1.25	30	UG/L	
	1,3-DICHLOROPROPANE	10	U	U	3.75	10	UG/L	
	1,4-DICHLOROBENZENE	7.5	U	U	3	7.5	UG/L	
	1-CHLOROHEXANE	13	R	U	3.5	13	UG/L	CCVMissi
	2,2-DICHLOROPROPANE	88	U	U	8	88	UG/L	
	2-CHLOROTOLUENE	10	U	U	2.5	10	UG/L	
	4-BROMOFLUOROBENZENE	105			2.5	2.5	ERCEN	
	4-CHLOROTOLUENE	15	U	U	2	15	UG/L	

BENZENE	10	U	U	2.5	10	UG/L	
BROMOBENZENE	7.5	U	U	2.25	7.5	UG/L	
BROMOCHLOROMETHANE	10	U	U	4.5	10	UG/L	
BROMODICHLOROMETHANE	20	U	U	2.5	20	UG/L	
BROMOFORM	30	U	U	4.5	30	UG/L	
BROMOMETHANE	28	R	U	5	28	UG/L	CCVMissi
CARBON TETRACHLORIDE	53	U	U	4	53	UG/L	
CHLOROBENZENE	10	U	U	3	10	UG/L	
CHLOROETHANE	25	R	U	7.5	25	UG/L	CCVMissi
CHLOROFORM	7.5	U	U	3.75	7.5	UG/L	
CHLOROMETHANE	33	R	U	2.25	33	UG/L	CCVMissi
CIS-1,2-DICHLOROETHENE	60			2	30	UG/L	
CIS-1,3-DICHLOROPROPENE	25	U	U	2.75	25	UG/L	
DIBROMOCHLOROMETHANE	13	U	U	4	13	UG/L	
DIBROMOFLUOROMETHANE	106			2.5	2.5	ERCEN	
DICHLORODIFLUOROMETHANE	25	R	U	9	25	UG/L	CCVMissi
ETHYLBENZENE	15	U	U	3	15	UG/L	
HEXACHLOROBUTADIENE	28	U	U	5	28	UG/L	
ISOPROPYLBENZENE	13	U	U	3.25	13	UG/L	
METHYLENE CHLORIDE	9.3	R	U	5.25	7.5	UG/L	CV%D
METHYLENE CHLORIDE	9.3	R	U	5.25	7.5	UG/L	IC%RSI
METHYLENE CHLORIDE	9.3	R	U	5.25	7.5	UG/L	BS%R
METHYLENE CHLORIDE	9.3	R	U	5.25	7.5	UG/L	BD%R
N-BUTYLBENZENE	28	U	U	2.75	28	UG/L	
N-PROPYLBENZENE	10	U	U	2.25	10	UG/L	
NAPHTHALENE	10	R	U	3	10	UG/L	IC%RSI
O-XYLENE	28	U	U	3.25	28	UG/L	
P-ISOPROPYLtolUENE	30	U	U	2.25	30	UG/L	
SEC-BUTYLBENZENE	33	U	U	3	33	UG/L	
STYRENE	10	U	U	3	10	UG/L	
TERT-BUTYLBENZENE	35	U	U	3.25	35	UG/L	
TETRAChLOROETHENE	35	U	U	4.25	35	UG/L	
TOLUENE	28	U	U	3.5	28	UG/L	
TOLUENE-D8	111			2.5	2.5	ERCEN	
TRANS-1,2-DICHLOROETHENE	15	U	U	2.25	15	UG/L	
TRICHLOROETHENE	400	J	U	2.5	25	UG/L	BD%R
TRICHLOROFUOROMETHANE	20	R	U	5.5	20	UG/L	CCVMissi
VINYL CHLORIDE	28	R	U	4	28	UG/L	CCVMissi

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA076	1,1,1,2-TETRAChLOROETHANE	5	U	U	1.48	5	UG/L	
	1,1,1-TRICHLOROETHANE	8	U	U	1.3	8	UG/L	
	1,1,2,2-TETRAChLOROETHANE	4	U	U	1.7	4	UG/L	
	1,1,2-TRICHLOROETHANE	10	U	U	1.6	10	UG/L	
	1,1-DICHLOROETHANE	4	U	U	1.1	4	UG/L	
	1,1-DICHLOROETHENE	12	R	U	1.5	12	UG/L	IC%RSI
	1,1-DICHLOROPROPENE	10	U	U	1.4	10	UG/L	
	1,2,3-TRICHLOROBENZENE	3	R	U	1.5	3	UG/L	IC%RSI
	1,2,3-TRICHLOROPROPANE	32	U	U	1.5	32	UG/L	
	1,2,4-TRICHLOROBENZENE	4	U	U	1.3	4	UG/L	
	1,2,4-TRIMETHYLBENZENE	110			0.9	13	UG/L	
	2-DIBROMO-3-CHLOROPROPAN	26	U	U	2.5	26	UG/L	
	1,2-DIBROMOETHANE	6	U	U	1.9	6	UG/L	
	1,2-DICHLOROBENZENE	3	U	U	1	3	UG/L	
	1,3,5-TRIMETHYLBENZENE	44			1	5	UG/L	

6521212

9712202 SW8260A

Page 12 of 17

	1,3-OICHLOROBENZENE	12	U	U	0.5	12	UG/L
	1,3-OICHLOROPROPANE	4	U	U	1.5	4	UG/L
	1,4-OICHLOROBENZENE	3	U	U	1.2	3	UG/L
	1-CHLOROHEXANE	5	R	U	1.4	5	UG/L
	2,2-OICHLOROPROPANE	35	U	U	3.2	35	UG/L
	2-CHLOROTOLUENE	4	U	U	1	4	UG/L
	4-BROMOFLUOROBENZENE	98			1	1	ERCEN
	4-CHLOROTOLUENE	6	U	U	0.8	6	UG/L
	BENZENE	130			1	4	UG/L
	BROMOBENZENE	3	U	U	0.9	3	UG/L
	BROMOCHLOROMETHANE	4	U	U	1.8	4	UG/L
	BROMOOICHLOROMETHANE	8	U	U	1	8	UG/L
	BROMOFORM	12	U	U	1.8	12	UG/L
	BROMOMETHANE	11	R	U	2	11	UG/L
	CARBON TETRACHLORIDE	21	U	U	1.6	21	UG/L
	CHLOROBENZENE	4	U	U	1.2	4	UG/L
	CHLOROETHANE	10	R	U	3	10	UG/L
	CHLOROFORM	3	U	U	1.5	3	UG/L
	CHLOROMETHANE	13	R	U	0.9	13	UG/L
	CIS-1,2-OICHLOROETHENE	12	U	U	0.8	12	UG/L
	CIS-1,3-OICHLOROPROPENE	10	U	U	1.1	10	UG/L
	OIBROMOCHLOROMETHANE	5	U	U	1.6	5	UG/L
	OIBROMOFLUOROMETHANE	108			1	1	ERCEN
	OICHLOROOIFLUOROMETHANI	10	R	U	3.6	10	UG/L
	ETHYLBENZENE	45			1.2	6	UG/L
	HEXAChLOROBUTADIENE	11	U	U	2	11	UG/L
	ISOPROPYLBENZENE	14			1.3	5	UG/L
	M,P-XYLENE	73	J		2.2	13	UG/L
	M,P-XYLENE	73	J		2.2	13	UG/L
	METHYLENE CHLORIDE	3	R	U	2.1	3	UG/L
	METHYLENE CHLORIDE	3	R	U	2.1	3	UG/L
	METHYLENE CHLORIDE	3	R	U	2.1	3	UG/L
	METHYLENE CHLORIDE	3	R	U	2.1	3	UG/L
	N-BUTYLBENZENE	3.5	F	F	1.1	11	UG/L
	N-PROPYLBENZENE	17			0.9	4	UG/L
	NAPHTHALENE	49	R	U	1.2	4	UG/L
	O-XYLENE	11	U	U	1.3	11	UG/L
	P-ISOPROPYLtolUENE	3.4	F	F	0.9	12	UG/L
	SEC-BUTYLBENZENE	3.4	F	F	1.2	13	UG/L
	STYRENE	4	U	U	1.2	4	UG/L
	TERT-BUTYLBENZENE	14	U	U	1.3	14	UG/L
	TETRACHLOROETHENE	14	U	U	1.7	14	UG/L
	TOLUENE	11	U	U	1.4	11	UG/L
	TOLUENE-08	109			1	1	ERCEN
	TRANS-1,2-OICHLOROETHENE	6	U	U	0.9	6	UG/L
	TRICHLOROETHENE	59	J		1	10	UG/L
	TRICHLOROFUOROMETHANE	8	R	U	2.2	8	UG/L
	VINYL CHLORIDE	11	R	U	1.6	11	UG/L

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA077	1,1,1,2-TETRACHLOROETHANE	25	U	U	7.4	25	UG/L	
	1,1,1-TRICHLOROETHANE	40	U	U	6.5	40	UG/L	
	1,1,2,2-TETRACHLOROETHANE	20	U	U	8.5	20	UG/L	
	1,1,2-TRICHLOROETHANE	50	U	U	8	50	UG/L	
	1,1-OICHLOROETHANE	20	U	U	5.5	20	UG/L	

6521213

1,1-DICHLOROETHENE	60	R	U	7.5	60	UG/L	IC%RSI
1,1-DICHLOROPROPENE	50	U	U	7	50	UG/L	
1,2,3-TRICHLOROBENZENE	15	R	U	7.5	15	UG/L	IC%RSI
1,2,3-TRICHLOROPROPANE	160	U	U	7.5	160	UG/L	
1,2,4-TRICHLOROBENZENE	20	U	U	6.5	20	UG/L	
1,2,4-TRIMETHYLBENZENE	65	U	U	4.5	65	UG/L	
2-DIBROMO-3-CHLOROPROPANE	130	U	U	12.5	130	UG/L	
1,2-DIBROMOETHANE	30	U	U	9.5	30	UG/L	
1,2-DICHLOROBENZENE	15	U	U	5	15	UG/L	
1,3,5-TRIMETHYLBENZENE	25	U	U	5	25	UG/L	
1,3-DICHLOROBENZENE	60	U	U	2.5	60	UG/L	
1,3-DICHLOROPROPANE	20	U	U	7.5	20	UG/L	
1,4-DICHLOROBENZENE	15	U	U	6	15	UG/L	
1-CHLOROHEXANE	25	R	U	7	25	UG/L	CCVMissi
2,2-DICHLOROPROPANE	180	U	U	16	180	UG/L	
2-CHLOROTOLUENE	20	U	U	5	20	UG/L	
4-BROMOFLUOROBENZENE	101			5	5	ERCEN	
4-CHLOROTOLUENE	30	U	U	4	30	UG/L	
BENZENE	20	U	U	5	20	UG/L	
BROMOBENZENE	15	U	U	4.5	15	UG/L	
BROMOCHLOROMETHANE	20	U	U	9	20	UG/L	
BROMODICHLOROMETHANE	40	U	U	5	40	UG/L	
BROMOFORM	60	U	U	9	60	UG/L	
BROMOMETHANE	55	R	U	10	55	UG/L	CCVMissi
CARBON TETRACHLORIDE	110	U	U	8	110	UG/L	
CHLOROBENZENE	20	U	U	6	20	UG/L	
CHLOROETHANE	—	R	U	15	50	UG/L	CCVMissi
CHLOROFORM	15	U	U	7.5	15	UG/L	
CHLOROMETHANE	65	R	U	4.5	65	UG/L	CCVMissi
CIS-1,2-DICHLOROETHENE	60	U	U	4	60	UG/L	
CIS-1,3-DICHLOROPROPENE	50	U	U	5.5	50	UG/L	
DIBROMOCHLOROMETHANE	25	U	U	8	25	UG/L	
DIBROMOFLUOROMETHANE	107		—	5	5	ERCEN	
DICHLORODIFLUOROMETHANE	50	R	U	18	50	UG/L	CCVMissi
ETHYLBENZENE	30	U	U	6	30	UG/L	
HEXACHLOROBUTADIENE	55	U	U	10	55	UG/L	
ISOPROPYLBENZENE	25	U	U	6.5	25	UG/L	
METHYLENE CHLORIDE	20	R	U	10.5	15	UG/L	BD%R
METHYLENE CHLORIDE	20	R	U	10.5	15	UG/L	IC%RSI
METHYLENE CHLORIDE	20	R	U	10.5	15	UG/L	CV%D
METHYLENE CHLORIDE	20	R	U	10.5	15	UG/L	BS%R
N-BUTYLBENZENE	55	U	U	5.5	55	UG/L	
N-PROPYLBENZENE	20	U	U	4.5	20	UG/L	
NAPHTHALENE	20	R	U	6	20	UG/L	IC%RSI
O-XYLENE	55	U	U	6.5	55	UG/L	
P-ISOPROPYLtolUENE	60	U	U	4.5	60	UG/L	
SEC-BUTYLBENZENE	65	U	U	6	65	UG/L	
STYRENE	20	U	U	6	20	UG/L	
TERT-BUTYLBENZENE	70	U	U	6.5	70	UG/L	
TETRACHLOROETHENE	70	U	U	8.5	70	UG/L	
TOLUENE	55	U	U	7	55	UG/L	
TOLUENE-D8	109	U	U	5	5	ERCEN	
TRANS-1,2-DICHLOROETHENE	30	U	U	4.5	30	UG/L	
TRICHLOROETHENE	1100	J	U	5	50	UG/L	BD%R
TRICHLOROFUOROMETHANE	40	R	U	11	40	UG/L	CCVMissi
VINYL CHLORIDE	55	R	U	8	55	UG/L	CCVMissi

6521214

9712202 SW8260A

Page 14 of 17

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA078	1,1,1,2-TETRACHLOROETHANE	25	U	U	7.4	25	UG/L	
	1,1,1-TRICHLOROETHANE	40	U	U	6.5	40	UG/L	
	1,1,2,2-TETRACHLOROETHANE	20	U	U	8.5	20	UG/L	
	1,1,2-TRICHLOROETHANE	50	U	U	8	50	UG/L	
	1,1-DICHLOROETHANE	20	U	U	5.5	20	UG/L	
	1,1-DICHLOROETHENE	60	R	U	7.5	60	UG/L	IC%RSI
	1,1-DICHLOROPROPENE	50	U	U	7	50	UG/L	
	1,2,3-TRICHLOROBENZENE	15	R	U	7.5	15	UG/L	IC%RSI
	1,2,3-TRICHLOROPROPANE	160	U	U	7.5	160	UG/L	
	1,2,4-TRICHLOROBENZENE	20	U	U	6.5	20	UG/L	
	1,2,4-TRIMETHYLBENZENE	65	U	U	4.5	65	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	130	U	U	12.5	130	UG/L	
	1,2-DIBROMOETHANE	30	U	U	9.5	30	UG/L	
	1,2-DICHLOROBENZENE	15	U	U	5	15	UG/L	
	1,3,5-TRIMETHYLBENZENE	25	U	U	5	25	UG/L	
	1,3-DICHLOROBENZENE	60	U	U	2.5	60	UG/L	
	1,3-DICHLOROPROPANE	20	U	U	7.5	20	UG/L	
	1,4-DICHLOROBENZENE	15	U	U	6	15	UG/L	
	1-CHLOROHEXANE	25	R	U	7	25	UG/L	CCVMISS
	2,2-DICHLOROPROPANE	180	U	U	16	180	UG/L	
	2-CHLOROTOLUENE	20	U	U	5	20	UG/L	
	4-BROMOFLUOROBENZENE	100			5	5	ERCEN	
	4-CHLOROTOLUENE	30	U	U	4	30	UG/L	
	BENZENE	20	U	U	5	20	UG/L	
	BROMOBENZENE	15	U	U	4.5	15	UG/L	
	BROMOCHLOROMETHANE	20	U	U	9	20	UG/L	
	BROMODICHLOROMETHANE	40	U	U	5	40	UG/L	
	BROMOFORM	60	U	U	9	60	UG/L	
	BROMOMETHANE	55	R	U	10	55	UG/L	CCVMISS
	CARBON TETRACHLORIDE	110	U	U	8	110	UG/L	
	CHLOROBENZENE	20	U	U	6	20	UG/L	
	CHLOROETHANE	50	R	U	15	50	UG/L	CCVMISS
	CHLOROFORM	15	U	U	7.5	15	UG/L	
	CHLOROMETHANE	65	R	U	4.5	65	UG/L	CCVMISS
	CIS-1,2-DICHLOROETHENE	60	U	U	4	60	UG/L	
	CIS-1,3-DICHLOROPROPENE	50	U	U	5.5	50	UG/L	
	DIBROMOCHLOROMETHANE	25	U	U	8	25	UG/L	
	DIBROMOFLUOROMETHANE	107			5	5	ERCEN	
	DICHLORODIFLUOROMETHANE	50	R	U	18	50	UG/L	CCVMISS
	ETHYLBENZENE	30	U	U	6	30	UG/L	
	HEXAChLOROBUTADIENE	55	U	U	10	55	UG/L	
	ISOPROPYLBENZENE	25	U	U	6.5	25	UG/L	
	METHYLENE CHLORIDE	23	R	U	10.5	15	UG/L	BD%R
	METHYLENE CHLORIDE	23	R	U	10.5	15	UG/L	BS%R
	METHYLENE CHLORIDE	23	R	U	10.5	15	UG/L	CV%D
	METHYLENE CHLORIDE	23	R	U	10.5	15	UG/L	IC%RSI
	N-BUTYLBENZENE	55	U	U	5.5	55	UG/L	
	N-PROPYLBENZENE	20	U	U	4.5	20	UG/L	
	NAPHTHALENE	20	R	U	6	20	UG/L	IC%RSI
	O-XYLENE	55	U	U	6.5	55	UG/L	
	P-ISOPROPYLtolUENE	60	U	U	4.5	60	UG/L	
	SEC-BUTYLBENZENE	65	U	U	6	65	UG/L	
	STYRENE	20	U	U	6	20	UG/L	

6521215

TERT-BUTYLBENZENE	70	U	U	6.5	70	UG/L
TETRACHLOROETHENE	70	U	U	8.5	70	UG/L
TOLUENE	55	U	U	7	55	UG/L
TOLUENE-D8	107			5	5	ERCEN
TRANS-1,2-DICHLOROETHENE	30	U	U	4.5	30	UG/L
TRICHLOROETHENE	420	J		5	50	UG/L
TRICHLOROFLUOROMETHANE	40	R	U	11	40	UG/L
VINYL CHLORIDE	55	R	U	8	55	UG/L
						BD%R
						CCVMissi
						CCVMissi

6521216

9712202 SW8260A

Page 16 of 17

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not requested
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

Sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

NAS FW JRB AOC 2

6521218


Data Quality Evaluation

CH2MHILL

SDG 9712202

Method SW6010A

Reviewer nh

Date 4/14/98

Matrix water

Senior Review Vito D'Aurora

Field Samples

All analytes with the exception of Lead reported detects.

Field ID	QAQC Type	Field ID	QAQC Type	Field ID	QAQC Type
----------	-----------	----------	-----------	----------	-----------

Water

AHA071EB1	EB	AHA072	N	AHA073FD1	FD
AHA075	N	LCSWD	BD		

1. Case Narrative Items of Interest

1. The method blanks results were < the PQL.
2. Initial and CCBs were < the PQL.

2. Blank Summary

Field Blanks Calcium was detected, but there was no effect on the samples. They were all > the calculated value.

Method Blanks The method blanks results were < the PQL.

Blank Type	Blank ID	Analyte	Result	Report Limit	Lab Flag	Units
LB	PBW	IRON	12.46	8	F	UG/L
EB	AHA071EB1	IRON	18.4	8	F	UG/L
EB	AHA071EB1	CALCIUM	122	104		UG/L

3. Spikes and Duplicates

Field Duplicates Four compounds were > 5 times the PQL; however, their RPD value was < UT. No flagging necessary.

6521219

9712202 SW6010A

Page 2 of 6

Laboratory Duplicates None

Matrix Spike None in this SDG.

4. Laboratory Control Sample All criteria were met.

5. Surrogates NA

**6. Tuning and Mass
Calibration** NA

7. Internal Standard NA

8. Calibration Information

Initial Calibration Initial and CCBs were < the PQL. The ICAL met the 0.995 criteria for linear regression.

Continuing Calibration CCBs were < the PQL and the CCVs were within 10% of expected value.

9. Holding Time Holding times were met.

10. Summary

General Comments All criteria were met. No flagging needed.

Data Package Completeness

1. Requested gen chem and metals pages on 3/31/98 missing in the packages. Deb will fax ASAP. Received Fed-X on 4/8/98 after going to the incorrect address.
2. Metals analyses were reported to the IDL and not the MDL. The RL and MDL values were identical as listed in the Edata.

Forms Review/ Items of Interest

All analytes with the exception of Lead reported detects.

COC Review

Complete

6521221

9712202 SW6010A

Page 4 of 6

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA072	ALUMINUM	673			44.2	44.2	UG/L	
	CALCIUM	154000			104	104	UG/L	
	IRON	2000			8	8	UG/L	
	LEAD	31.2	U	U	31.2	31.2	UG/L	
	MAGNESIUM	5220			95.4	95.4	UG/L	
	POTASSIUM	1130	F	F	69.9	69.9	UG/L	
	SODIUM	162000			60.5	60.5	UG/L	
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA073FD1	ALUMINUM	702			44.2	44.2	UG/L	
	CALCIUM	154000			104	104	UG/L	
	IRON	2130			8	8	UG/L	
	LEAD	31.2	U	U	31.2	31.2	UG/L	
	MAGNESIUM	5200			95.4	95.4	UG/L	
	POTASSIUM	1120	F	F	69.9	69.9	UG/L	
	SODIUM	160000			60.5	60.5	UG/L	
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA075	ALUMINUM	885			44.2	44.2	UG/L	
	CALCIUM	152000			104	104	UG/L	
	IRON	1480			8	8	UG/L	
	LEAD	31.2	U	U	31.2	31.2	UG/L	
	MAGNESIUM	3850			95.4	95.4	UG/L	
	POTASSIUM	2680	F	F	69.9	69.9	UG/L	
	SODIUM	33300			60.5	60.5	UG/L	

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%D	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatnx	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%D	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

6521223

,9712202 SW6010A

Page 6 of 6

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.



Data Quality Evaluation

SDG 9712202

Method E310.1

Reviewer nh

Date 4/14/98

Matrix water

- Senior Review Vito D'Aurora

Field Samples Detects reported > the RL.

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
-----------------	------------------	-----------------	------------------	-----------------	------------------

Water

AHA071EB1
AHA075

EB
N

AHA072

N

AHA073FD1

FD

1. Case Narrative
Items of Interest Nothing to note. Screening method.

2. Blank Summary

Field Blanks Alkalinity not detected > the RL.

Method Blanks Alkalinity not detected > the RL.

3. Spikes and Duplicates

Field Duplicates Alkalinity reported > the RL. The RPD met criteria.

Laboratory Duplicates In-house criteria met for duplicate.

Matrix Spike None.

6521225

9712202 E310.1

Page 2 of 6

4. Laboratory Control Sample In-house acceptance criteria met.

5. Surrogates Not applicable.

6. Tuning and Mass Calibration Not applicable.

7. Internal Standard Not applicable.

8. Calibration Information

Initial Calibration Not in package.

Continuing Calibration Not in package.

9. Holding Time Holding times were exceeded by 2 days. The samples were flagged J and UJ.

10. Summary

General Comments 1. Screening method. Reviewed data to the in-house acceptance criteria. Field duplicate criteria provided in the QAPP only. Flagged the data with an S.
2. Holding times were exceeded by 2 days. The samples were flagged J and UJ.

Data Package Completeness 1. Screening method. Reviewed data to the in-house acceptance criteria.
2. The HT out of compliance was not mentioned in the case narrative.

Forms Review/ Items of Interest Nothing of interest (screening method).

1000

9712202 E310.1

6521226

Page 3 of 6

COC Review Complete

6521227

9712202 E310.1

Page 4 of 6

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag		MDL	RL	Units	Validation Reason
AHA072	TOTAL ALKALINITY	328	SJ			20	20	MG/L	HT>UCI
Field ID	Analyte	Result	Final Flag	Lab Flag		MDL	RL	Units	Validation Reason
AHA073FD1	TOTAL ALKALINITY	330	SJ			50	50	MG/L	HT>UCI
Field ID	Analyte	Result	Final Flag	Lab Flag		MDL	RL	Units	Validation Reason
AHA075	TOTAL ALKALINITY	200	SJ			50	50	MG/L	HT>UCI

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

6521229

9712202 E310.1

Page 6 of 6

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

6521230
FSS 77
NAS FW JRB AOC 2



6521230

Data Quality Evaluation

CH2MHILL

SDG 9712202

Method SW9056

Reviewer nh

Date 4/14/98

Matrix water

Senior Review Vito D'Aurora

Field Samples

All analytes with the exception of Nitrite and Orthophosphate reported detects. Samples 3 & 4 were diluted 25 fold for Chloride and Sulfate. Sample 6 was diluted 10 fold for Chloride

Field ID	QAQC Type	Field ID	QAQC Type	Field ID	QAQC Type
-----------------	------------------	-----------------	------------------	-----------------	------------------

Water

AHA071EB1	EB	AHA072	N	AHA073FD1	FD
AHA075	N				

1. Case Narrative

Items of Interest

1. The MSD recovery for Orthophosphate exceeded acceptance limits due to matrix effect.

2. Blank Summary

Field Blanks Analytes not detected > the RL.

Method Blanks No analytes detected > RL.

3. Spikes and Duplicates

Field Duplicates All RPD criteria were met.

6521231

9712202 SW9056

Page 2 of 6

Laboratory Duplicates None

Matrix Spike The MS/MSD was run with SDG 9712185.

4. Laboratory Control Sample All criteria were met.

5. Surrogates Not applicable.

6. Tuning and Mass
Calibration Not applicable.

7. Internal Standard Not applicable.

8. Calibration Information

Initial Calibration Internal criteria met. No correlation coefficient found to validate.

Continuing Calibration All analytes within 10% of expected value.

9. Holding Time Holding times were met.

10. Summary

General Comments

Data Package Completeness 1. Missing pages throughout the Gen Chem fraction. No Form 2, MS/MSD or LCS forms provided for the Orthophosphate analysis except for a summary form. Left message for Deb 3/30/98. Spoke to Deb on 3/31/98 re: the missing pages in the packages. Deb will fax ASAP. Received Fed-X on 4/8/98 after going to the incorrect address.

6521232

2. In-house criteria used for calibrations.

Forms Review/ Items of Interest	All analytes with the exception of Nitrite and Orthophosphate reported detects. Samples 3 & 4 were diluted 25 fold for Chloride and Sulfate. Sample 6 was diluted 10 fold for Chloride
COC Review	No MS/MSD for Orthophosphate in package.

6521233

9712202 SW9056

Page 4 of 6

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA072	BROMIDE	1			0.1	0.1	MG/L	
	CHLORIDE	210			5	5	MG/L	
	FLUORIDE	0.5			0.2	0.2	MG/L	
	NITRATE	7.6			0.1	0.1	MG/L	
	NITRITE	0.4	U	U	0.4	0.4	MG/L	
	ORTHOPHOSPHATE	0.1	U	U	0.1	0.1	MG/L	
	SULFATE	87			5	5	MG/L	
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA073FD1	BROMIDE	1			0.1	0.1	MG/L	
	CHLORIDE	210			5	5	MG/L	
	FLUORIDE	0.6			0.2	0.2	MG/L	
	NITRATE	7.8			0.1	0.1	MG/L	
	NITRITE	0.4	U	U	0.4	0.4	MG/L	
	ORTHOPHOSPHATE	0.1	U	U	0.1	0.1	MG/L	
	SULFATE	90			5	5	MG/L	
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA075	BROMIDE	0.6			0.1	0.1	MG/L	
	CHLORIDE	42			2	2	MG/L	
	FLUORIDE	0.3			0.2	0.2	MG/L	
	NITRATE	4			0.1	0.1	MG/L	
	NITRITE	0.4	U	U	0.4	0.4	MG/L	
	ORTHOPHOSPHATE	0.1	U	U	0.1	0.1	MG/L	
	SULFATE	20.9			0.2	0.2	MG/L	

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used, another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatnx	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

6521235

9712202 SW9056

Page 6 of 6

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Tripp blank
TB<RL	Tripp blank concentration less than RL
TB>RL	Tripp blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

6521236
T-111
NAS FW JRB AOC 2



CH2MHILL

Data Quality Evaluation

SDG 9712205

Method SW8260A

Reviewer nh

Date 4/1/98

Matrix Water

Senior Review Vito D'Aurora

Field Samples

Due to the concentration of target analytes, samples were analyzed at a higher dilution.

Field ID	QAQC Type	Field ID	QAQC Type	Field ID	QAQC Type
-----------------	------------------	-----------------	------------------	-----------------	------------------

Water

AHA079TB1	- TB	AHA080EB1	EB	AHA081	N
AHA082	N	AHA083	N	AHA084	N
AHA085	N	LABQC	BD		

1. Case Narrative Items of Interest

1. Methylene Chloride was detected > the RL in the method blank. This compound was detected < the calculated value, so the data were flagged U (by the lab). Samples reporting this compound which were not flagged U were run at a dilution..
2. Methylene Chloride did not meet acceptance criteria in the LCS.
3. Thirteen compounds did not meet criteria in the MS/MSD. The recoveries of these compounds in the LCS/LCD were within CLs, which demonstrated the spike outliers in the matrix spikes were due to matrix effects, so no further action is needed.
4. Due to the concentration of target analytes, samples were analyzed at a higher dilution.
5. Several compounds from the ICV/CCV order curve were within the acceptance limit but exceeded the 15% RSD criteria. These were quantitated using the average response factor due to software problem.

2. Blank Summary

Field Blanks

Chloroform was detected above the RL in the Trip blank; however, the samples were below the calculated value and were all non-detects. No flagging necessary.

6521237

9712205 SW8260A

Page 2 of 13

Method Blanks

1. Methylene Chloride was detected > the RL in the method blank. This compound was detected < the calculated value, so the data were flagged U (by the lab). Sample 5 was > the calculated value so no validating necessary.

<u>Blank Type</u>	<u>Blank ID</u>	<u>Analyte</u>	<u>Result</u>	<u>ReportLimit</u>	<u>LabFlag</u>	<u>Units</u>
TB	AHA079TB1	CHLOROFORM	0.67	0.15		UG/L
LB	LABQC	METHYLENE CHLORI	0.72	0.21		UG/L

3. Spikes and Duplicates

Field Duplicates None in this SDG.

Laboratory Duplicates None

Matrix Spike The MS/MSD was run with SDG 9712227.

4. Laboratory Control Sample

Methylene Chloride did not meet the LCL acceptance criteria in the LCS. Samples were flagged R for non-detects and one sample was flagged J for a positive result.

<u>Matrix</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>Analyte</u>	<u>Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
WATER	BS	LABQC	METHYLENE CHLORIDE	71	75	125

5. Surrogates

All criteria were met.

6. Tuning and Mass Calibration

All criteria met.

7. Internal Standard

All internal standard recoveries were within acceptance criteria.

8. Calibration Information

Initial Calibration Methylene Chloride exceeded the %RSD criteria in the ICAL from 12/29/97. The samples were flagged R.

<u>Field ID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation Reason</u>
AHA081	METHYLENE CHLORIDE	R	IC%RSD

6521238

9712205 SW8260A

Page 3 of 13

AHA082	METHYLENE CHLORIDE	R	IC%RSD
AHA083	METHYLENE CHLORIDE	R	IC%RSD
AHA084	METHYLENE CHLORIDE	R	IC%RSD
AHA085	METHYLENE CHLORIDE	R	IC%RSD

Continuing Calibration

1. Dichlorodifluoromethane, Chloromethane and Methylene Chloride exceeded the 25% criteria in the CCV from 12/30/97. The samples were flagged R.

2. Seven compounds were missing from the second source CCV from 12/26/97. Methylene Chloride in the exceeded 25% of the expected value. The samples were validated with an R flag.

<u>Field ID</u>	<u>LabsampleID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation</u>
AHA081	9712205-3	1-CHLOROHEXANE	R	CCVMiss
AHA081	9712205-3	BROMOMETHANE	R	CCVMiss
AHA081	9712205-3	CHLOROETHANE	R	CCVMiss
AHA081	9712205-3	CHLOROMETHANE	R	CCVMiss
AHA081	9712205-3	CHLOROMETHANE	R	CV%D
AHA081	9712205-3	DICHLORODIFLUOROMETHANE	R	CV%D
AHA081	9712205-3	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA081	9712205-3	METHYLENE CHLORIDE	R	CV%D
AHA081	9712205-3	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA081	9712205-3	VINYL CHLORIDE	R	CCVMiss
AHA082	9712205-4	1-CHLOROHEXANE	R	CCVMiss
AHA082	9712205-4	BROMOMETHANE	R	CCVMiss
AHA082	9712205-4	CHLOROETHANE	R	CCVMiss
AHA082	9712205-4	CHLOROMETHANE	R	CCVMiss
AHA082	9712205-4	CHLOROMETHANE	R	CV%D
AHA082	9712205-4	DICHLORODIFLUOROMETHANE	R	CV%D
AHA082	9712205-4	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA082	9712205-4	METHYLENE CHLORIDE	R	CV%D
AHA082	9712205-4	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA082	9712205-4	VINYL CHLORIDE	R	CCVMiss
AHA083	9712205-5	1-CHLOROHEXANE	R	CCVMiss
AHA083	9712205-5	BROMOMETHANE	R	CCVMiss
AHA083	9712205-5	CHLOROETHANE	R	CCVMiss
AHA083	9712205-5	CHLOROMETHANE	R	CV%D
AHA083	9712205-5	CHLOROMETHANE	R	CCVMiss
AHA083	9712205-5	DICHLORODIFLUOROMETHANE	R	CV%D
AHA083	9712205-5	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA083	9712205-5	METHYLENE CHLORIDE	R	CV%D
AHA083	9712205-5	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA083	9712205-5	VINYL CHLORIDE	R	CCVMiss
AHA084	9712205-6	1-CHLOROHEXANE	R	CCVMiss
AHA084	9712205-6	BROMOMETHANE	R	CCVMiss
AHA084	9712205-6	CHLOROETHANE	R	CCVMiss

6521239

9712205 SW8260A

Page 4 of 13

AHA084	9712205-6	CHLOROMETHANE	R	CCVMiss
AHA084	9712205-6	CHLOROMETHANE	R	CV%D
AHA084	9712205-6	DICHLORODIFLUOROMETHANE	R	CV%D
AHA084	9712205-6	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA084	9712205-6	METHYLENE CHLORIDE	R	CV%D
AHA084	9712205-6	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA084	9712205-6	VINYL CHLORIDE	R	CCVMiss
AHA085	9712205-7	1-CHLOROHEXANE	R	CCVMiss
AHA085	9712205-7	BROMOMETHANE	R	CCVMiss
AHA085	9712205-7	CHLOROETHANE	R	CCVMiss
AHA085	9712205-7	CHLOROMETHANE	R	CV%D
AHA085	9712205-7	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA085	9712205-7	DICHLORODIFLUOROMETHANE	R	CV%D
AHA085	9712205-7	METHYLENE CHLORIDE	R	CV%D
AHA085	9712205-7	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA085	9712205-7	VINYL CHLORIDE	R	CCVMiss

9. Holding Time

Holding times were met.

10. Summary

General Comments 1. Methylene Chloride did not meet the LCL acceptance criteria in the LCS. Samples were flagged R for non-detects and one sample was flagged J for a positive result.
2. Methylene Chloride exceeded the %RSD criteria in the ICAL from 12/29/97. The samples were flagged R.
3. Dichlorodifluoromethane, Chloromethane and Methylene Chloride exceeded the 25% criteria in the CCV from 12/30/97. The samples were flagged R.
4. Seven compounds were missing from the second source CCV from 12/26/97. Methylene Chloride in the exceeded 25% of the expected value. The samples were validated with an R flag.

Data Package Completeness Complete.

Forms Review/ Items of Interest Due to the concentration of target analytes, samples were analyzed at a higher dilution.

COC Review Complete

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA081	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.148	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	U	U	0.16	1	UG/L	
	1,1-DICHLOROETHANE	0.4	U	U	0.11	0.4	UG/L	
	1,1-DICHLOROETHENE	1.2	U	U	0.15	1.2	UG/L	
	1,1-DICHLOROPROPENE	1	U	U	0.14	1	UG/L	
	1,2,3-TRICHLOROBENZENE	0.3	U	U	0.15	0.3	UG/L	
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	U	U	0.13	0.4	UG/L	
	1,2,4-TRIMETHYLBENZENE	1.3	U	U	0.09	1.3	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	2.6	U	U	0.25	2.6	UG/L	
	1,2-DIBROMOETHANE	0.6	U	U	0.19	0.6	UG/L	
	1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
	1,2-DICHLOROETHANE	0.6	U	U	0.33	0.6	UG/L	
	1,2-DICHLOROPROPANE	0.4	U	U	0.09	0.4	UG/L	
	1,3,5-TRIMETHYLBENZENE	0.5	U	U	0.1	0.5	UG/L	
	1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
	1,3-DICHLOROPROPANE	0.4	U	U	0.15	0.4	UG/L	
	1,4-DICHLOROBENZENE	0.3	U	U	0.12	0.3	UG/L	
	1-CHLOROHEXANE	0.5	R	U	0.14	0.5	UG/L	CCVMissi
	2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L	
	2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	
	4-BROMOFLUOROBENZENE	110			0.1	0.1	ERCEN	
	4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L	
	BENZENE	0.4	U	U	0.1	0.4	UG/L	
	BROMOBENZENE	0.3	U	U	0.09	0.3	UG/L	
	BROMOCHLOROMETHANE	0.4	U	U	0.18	0.4	UG/L	
	BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L	
	BROMOFORM	1.2	U	U	0.18	1.2	UG/L	
	BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	CCVMissi
	CARBON TETRACHLORIDE	2.1	U	U	0.16	2.1	UG/L	
	CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	
	CHLOROETHANE	1	R	U	0.3	1	UG/L	CCVMissi
	CHLOROFORM	0.3	U	U	0.15	0.3	UG/L	
	CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	CV%D
	CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	CCVMissi
	CIS-1,2-DICHLOROETHENE	1.2	U	U	0.08	1.2	UG/L	
	CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L	
	DIBROMOCHLOROMETHANE	0.5	U	U	0.16	0.5	UG/L	
	DIBROMOFLUOROMETHANE	104			0.1	0.1	ERCEN	
	DIBROMOMETHANE	2.4	U	U	0.2	2.4	UG/L	
	DICHLORODIFLUOROMETHANI	1	R	U	0.36	1	UG/L	CCVMissi
	DICHLORODIFLUOROMETHANI	1	R	U	0.36	1	UG/L	CV%D
	ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L	
	HEXACHLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L	
	ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L	

6521241

9712205 SW8260A

Page 6 of 13

M,P-XYLENE	1.3	U	U	0.22	1.3	UG/L	
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BS%R
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	CV%D
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	IC%RSI
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	SSCCV%
N-BUTYLBENZENE	1.1	U	U	0.11	1.1	UG/L	
N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L	
NAPHTHALENE	0.4	U	U	0.12	0.4	UG/L	
O-XYLENE	1.1	U	U	0.13	1.1	UG/L	
P-ISOPROPYLtolUENE	1.2	U	U	0.09	1.2	UG/L	
SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L	
STYRENE	0.4	U	U	0.12	0.4	UG/L	
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L	
TETRACHLOROETHENE	1.4	U	U	0.17	1.4	UG/L	
TOLUENE	1.1	U	U	0.14	1.1	UG/L	
TOLUENE-D8	111			0.1	0.1	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.6	U	U	0.09	0.6	UG/L	
TRANS-1,3-DICHLOROPROPENE	1	U	U	0.17	1	UG/L	
TRICHLOROETHENE	1	U	U	0.1	1	UG/L	
TRICHLOROFLUOROMETHANE	0.8	R	U	0.22	0.8	UG/L	CCVMissi
VINYL CHLORIDE	1.1	R	U	0.16	1.1	UG/L	CCVMissi

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA082	1,1,1,2-TETRACHLOROETHANE	1	U	U	0.296	1	UG/L	
	1,1,1-TRICHLOROETHANE	1.6	U	U	0.26	1.6	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.8	U	U	0.34	0.8	UG/L	
	1,1,2-TRICHLOROETHANE	2	U	U	0.32	2	UG/L	
	1,1-DICHLOROETHANE	0.8	U	U	0.22	0.8	UG/L	
	1,1-DICHLOROETHENE	2.4	U	U	0.3	2.4	UG/L	
	1,1-DICHLOROPROPENE	2	U	U	0.28	2	UG/L	
	1,2,3-TRICHLOROBENZENE	0.6	U	U	0.3	0.6	UG/L	
	1,2,3-TRICHLOROPROPANE	6.4	U	U	0.3	6.4	UG/L	
	1,2,4-TRICHLOROBENZENE	0.8	U	U	0.26	0.8	UG/L	
	1,2,4-TRIMETHYLBENZENE	2.6	U	U	0.18	2.6	UG/L	
	2-DIBROMO-3-CHLOROPROPAN	5.2	U	U	0.5	5.2	UG/L	
	1,2-DIBROMOETHANE	1.2	U	U	0.38	1.2	UG/L	
	1,2-DICHLOROBENZENE	0.6	U	U	0.2	0.6	UG/L	
	1,2-DICHLOROETHANE	1.2	U	U	0.66	1.2	UG/L	
	1,2-DICHLOROPROPANE	0.8	U	U	0.18	0.8	UG/L	
	1,3,5-TRIMETHYLBENZENE	1	U	U	0.2	1	UG/L	
	1,3-DICHLOROBENZENE	2.4	U	U	0.1	2.4	UG/L	
	1,3-DICHLOROPROPANE	0.8	U	U	0.3	0.8	UG/L	
	1,4-DICHLOROBENZENE	0.6	U	U	0.24	0.6	UG/L	
	1-CHLOROHEXANE	1	R	U	0.28	1	UG/L	CCVMissi
	2,2-DICHLOROPROPANE	7	U	U	0.64	7	UG/L	
	2-CHLOROTOLUENE	0.8	U	U	0.2	0.8	UG/L	
	4-BROMOFUOROBENZENE	119			0.2	0.2	ERCEN	
	4-CHLOROTOLUENE	1.2	U	U	0.16	1.2	UG/L	
	BENZENE	0.8	U	U	0.2	0.8	UG/L	
	BROMOBENZENE	0.6	U	U	0.18	0.6	UG/L	
	BROMOCHLOROMETHANE	0.8	U	U	0.36	0.8	UG/L	
	BROMODICHLOROMETHANE	1.6	U	U	0.2	1.6	UG/L	
	BROMOFORM	2.4	U	U	0.36	2.4	UG/L	
	BROMOMETHANE	2.2	R	U	0.4	2.2	UG/L	CCVMissi
	CARBON TETRACHLORIDE	4.2	U	U	0.32	4.2	UG/L	

CHLOROBENZENE	0.8	U	U	0.24	0.8	UG/L	
CHLOROETHANE	2	R	U	0.6	2	UG/L	CCVMissi
CHLOROFORM	0.6	U	U	0.3	0.6	UG/L	
CHLOROMETHANE	2.6	R	U	0.18	2.6	UG/L	CCVMissi
CHLOROMETHANE	2.6	R	U	0.18	2.6	UG/L	CV%D
CIS-1,2-DICHLOROETHENE	45			0.16	2.4	UG/L	
CIS-1,3-DICHLOROPROPENE	2	U	U	0.22	2	UG/L	
DIBROMOCHLOROMETHANE	1	U	U	0.32	1	UG/L	
DIBROMOFLUOROMETHANE	104			0.2	0.2	ERCEN	
DIBROMOMETHANE	4.8	U	U	0.4	4.8	UG/L	
DICHLORODIFLUOROMETHANE	2	R	U	0.72	2	UG/L	CV%D
DICHLORODIFLUOROMETHANE	2	R	U	0.72	2	UG/L	CCVMissi
ETHYLBENZENE	1.2	U	U	0.24	1.2	UG/L	
HEXA-CHLOROBUTADIENE	2.2	U	U	0.4	2.2	UG/L	
ISOPROPYLBENZENE	1	U	U	0.26	1	UG/L	
M,P-XYLENE	2.6	U	U	0.44	2.6	UG/L	
METHYLENE CHLORIDE	1.1	R	U	0.42	0.6	UG/L	BS%R
METHYLENE CHLORIDE	1.1	R	U	0.42	0.6	UG/L	CV%D
METHYLENE CHLORIDE	1.1	R	U	0.42	0.6	UG/L	IC%RSI
METHYLENE CHLORIDE	1.1	R	U	0.42	0.6	UG/L	SSCCV%
N-BUTYLBENZENE	2.2	U	U	0.22	2.2	UG/L	
N-PROPYLBENZENE	0.8	U	U	0.18	0.8	UG/L	
NAPHTHALENE	0.8	U	U	0.24	0.8	UG/L	
O-XYLENE	2.2	U	U	0.26	2.2	UG/L	
P-ISOPROPYL TOLUENE	2.4	U	U	0.18	2.4	UG/L	
SEC-BUTYLBENZENE	2.6	U	U	0.24	2.6	UG/L	
STYRENE	0.8	U	U	0.24	0.8	UG/L	
TERT-BUTYLBENZENE	2.8	U	U	0.26	2.8	UG/L	
TETRA-CHLOROETHENE	13			0.34	2.8	UG/L	
TOLUENE	2.2	U	U	0.28	2.2	UG/L	
TOLUENE-D8	107			0.2	0.2	ERCEN	
TRANS-1,2-DICHLOROETHENE	51			0.18	1.2	UG/L	
TRANS-1,3-DICHLOROPROPENE	2	U	U	0.34	2	UG/L	
TRICHLOROETHENE	70			0.2	2	UG/L	
TRICHLOROFUOROMETHANE	1.6	R	U	0.44	1.6	UG/L	CCVMissi
VINYL CHLORIDE	2.2	R	U	0.32	2.2	UG/L	CCVMissi

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA083	1,1,1,2-TETRA-CHLOROETHANE	10	U	U	2.96	10	UG/L	
	1,1,1-TRICHLOROETHANE	16	U	U	2.6	16	UG/L	
	1,1,2,2-TETRA-CHLOROETHANE	8	U	U	3.4	8	UG/L	
	1,1,2-TRICHLOROETHANE	20	U	U	3.2	20	UG/L	
	1,1-DICHLOROETHANE	8	U	U	2.2	8	UG/L	
	1,1-DICHLOROETHENE	24	U	U	3	24	UG/L	
	1,1-DICHLOROPROPENE	20	U	U	2.8	20	UG/L	
	1,2,3-TRICHLOROBENZENE	6	U	U	3	6	UG/L	
	1,2,3-TRICHLOROPROPANE	64	U	U	3	64	UG/L	
	1,2,4-TRICHLOROBENZENE	8	U	U	2.6	8	UG/L	
	1,2,4-TRIMETHYL BENZENE	26	U	U	1.8	26	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	52	U	U	5	52	UG/L	
	1,2-DIBROMOETHANE	12	U	U	3.8	12	UG/L	
	1,2-DICHLOROBENZENE	6	U	U	2	6	UG/L	
	1,2-DICHLOROETHANE	12	U	U	6.6	12	UG/L	
	1,2-DICHLOROPROPANE	8	U	U	1.8	8	UG/L	
	1,3,5-TRIMETHYL BENZENE	10	U	U	2	10	UG/L	

6521243

9712205 SW8260A

Page 8 of 13

	1,3-DICHLOROBENZENE	24	U	U	I	24	UG/L	
	1,3-DICHLOROPROPANE	8	U	U	3	8	UG/L	
	1,4-DICHLOROBENZENE	6	U	U	24	6	UG/L	
	1-CHLOROHEXANE	10	R	U	28	10	UG/L	CCVMissi
	2,2-DICHLOROPROPANE	70	U	U	64	70	UG/L	
	2-CHLOROTOLUENE	8	U	U	2	8	UG/L	
	4-BROMOFLUOROBENZENE	109			2	2	ERCEN	
	4-CHLOROTOLUENE	12	U	U	1.6	12	UG/L	
	BENZENE	8	U	U	2	8	UG/L	
	BROMOBENZENE	6	U	U	1.8	6	UG/L	
	BROMOCHLOROMETHANE	8	U	U	3.6	8	UG/L	
	BROMODICHLOROMETHANE	16	U	U	2	16	UG/L	
	BROMOFORM	24	U	U	3.6	24	UG/L	
	BROMOMETHANE	22	R	U	4	22	UG/L	CCVMissi
	CARBON TETRACHLORIDE	42	U	U	3.2	42	UG/L	
	CHLOROBENZENE	8	U	U	2.4	8	UG/L	
	CHLOROETHANE	20	R	U	6	20	UG/L	CCVMissi
	CHLOROFORM	6	U	U	3	6	UG/L	
	CHLOROMETHANE	26	R	U	1.8	26	UG/L	CV%D
	CHLOROMETHANE	26	R	U	1.8	26	UG/L	CCVMissi
-	CIS-1,2-DICHLOROETHENE	56			1.6	24	UG/L	
-	CIS-1,3-DICHLOROPROPENE	20	U	U	2.2	20	UG/L	
-	DIBROMOCHLOROMETHANE	10	U	U	3.2	10	UG/L	
-	DIBROMOFLUOROMETHANE	107			2	2	ERCEN	
-	DIBROMOMETHANE	48	U	U	4	48	UG/L	
-	DICHLORODIFLUOROMETHANI	20	R	U	7.2	20	UG/L	CCVMissi
-	DICHLORODIFLUOROMETHANI	20	R	U	7.2	20	UG/L	CV%D
-	ETHYLBENZENE	12	U	U	2.4	12	UG/L	
-	HEXAChLOROBUTADIENE	22	U	U	4	22	UG/L	
-	ISOPROPYLBENZENE	10	U	U	2.6	10	UG/L	
-	M,P-XYLENE	26	U	U	4.4	26	UG/L	
-	METHYLENE CHLORIDE	15	R		4.2	6	UG/L	CV%D
-	METHYLENE CHLORIDE	15	R		4.2	6	UG/L	IC%RSI
-	METHYLENE CHLORIDE	15	R		4.2	6	UG/L	SSCCV%
-	N-BUTYLBENZENE	22	U	U	2.2	22	UG/L	
-	N-PROPYLBENZENE	8	U	U	1.8	8	UG/L	
-	NAPHTHALENE	8	U	U	2.4	8	UG/L	
-	O-XYLENE	22	U	U	2.6	22	UG/L	
-	P-ISOPROPYLTOLUENE	24	U	U	1.8	24	UG/L	
-	SEC-BUTYLBENZENE	26	U	U	2.4	26	UG/L	
-	STYRENE	8	U	U	2.4	8	UG/L	
-	TERT-BUTYLBENZENE	28	U	U	2.6	28	UG/L	
-	TETRAChLOROETHENE	28	U	U	3.4	28	UG/L	
-	TOLUENE	22	U	U	2.8	22	UG/L	
-	TOLUENE-D8	110			2	2	ERCEN	
-	TRANS-1,2-DICHLOROETHENE	11	F	F	1.8	12	UG/L	
-	TRANS-1,3-DICHLOROPROPENE	20	U	U	3.4	20	UG/L	
-	TRICHLOROETHENE	520			2	20	UG/L	
-	TRICHLOROFLUOROMETHANE	16	R	U	4.4	16	UG/L	CCVMissi
-	VINYL CHLORIDE	22	R	U	3.2	22	UG/L	CCVMissi

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA084	1,1,1,2-TETRAChLOROETHANE	2.5	U	U	0.74	2.5	UG/L	
	1,1,1-TRICHLOROETHANE	4	U	U	0.65	4	UG/L	
	1,1,2,2-TETRAChLOROETHANE	2	U	U	0.85	2	UG/L	

1,1,2-TRICHLOROETHANE	5	U	U	0.8	5	UG/L
1,1-DICHLOROETHANE	2	U	U	0.55	2	UG/L
1,1-DICHLOROETHENE	6	U	U	0.75	6	UG/L
1,1-DICHLOROPROPENE	5	U	U	0.7	5	UG/L
1,2,3-TRICHLOROBENZENE	15	U	U	0.75	1.5	UG/L
1,2,3-TRICHLOROPROPANE	16	U	U	0.75	16	UG/L
1,2,4-TRICHLOROBENZENE	2	U	U	0.65	2	UG/L
1,2,4-TRIMETHYLBENZENE	6.5	U	U	0.45	6.5	UG/L
2-DIBROMO-3-CHLOROPROPANE	13	U	U	1.25	13	UG/L
1,2-DIBROMOETHANE	3	U	U	0.95	3	UG/L
1,2-DICHLOROBENZENE	1.5	U	U	0.5	1.5	UG/L
1,2-DICHLOROETHANE	3	U	U	1.65	3	UG/L
1,2-DICHLOROPROPANE	2	U	U	0.45	2	UG/L
1,3,5-TRIMETHYLBENZENE	2.5	U	U	0.5	2.5	UG/L
1,3-DICHLOROBENZENE	6	U	U	0.25	6	UG/L
1,3-DICHLOROPROPANE	2	U	U	0.75	2	UG/L
1,4-DICHLOROBENZENE	1.5	U	U	0.6	1.5	UG/L
1-CHLOROHEXANE	2.5	R	U	0.7	2.5	UG/L
2,2-DICHLOROPROPANE	18	U	U	1.6	18	UG/L
2-CHLOROTOLUENE	2	U	U	0.5	2	UG/L
4-BROMOFLUOROBENZENE	119			0.5	0.5	ERCEN
4-CHLOROTOLUENE	3	U	U	0.4	3	UG/L
BENZENE	2	U	U	0.5	2	UG/L
BROMOBENZENE	1.5	U	U	0.45	1.5	UG/L
BROMOCHLOROMETHANE	2	U	U	0.9	2	UG/L
BROMODICHLOROMETHANE	4	U	U	0.5	4	UG/L
BROMOFORM	6	U	U	0.9	6	UG/L
BROMOMETHANE	5.5	R	U	1	5.5	UG/L
CARBON TETRACHLORIDE	11	U	U	0.8	11	UG/L
CHLOROBENZENE	2	U	U	0.6	2	UG/L
CHLOROETHANE	5	R	U	1.5	5	UG/L
CHLOROFORM	1.5	U	U	0.75	1.5	UG/L
CHLOROMETHANE	6.5	R	U	0.45	6.5	UG/L
CHLOROMETHANE	6.5	R	U	0.45	6.5	UG/L
CIS-1,2-DICHLOROETHENE	22			0.4	6	UG/L
CIS-1,3-DICHLOROPROPENE	5	U	U	0.55	5	UG/L
DIBROMOCHLOROMETHANE	2.5	U	U	0.8	2.5	UG/L
DIBROMOFLUOROMETHANE	109			0.5	0.5	ERCEN
DIBROMOMETHANE	12	U	U	1	12	UG/L
DICHLORODIFLUOROMETHANE	5	R	U	1.8	5	UG/L
DICHLORODIFLUOROMETHANE	5	R	U	1.8	5	UG/L
ETHYLBENZENE	3	U	U	0.6	3	UG/L
HEXAChLOROBUTADIENE	5.5	U	U	1	5.5	UG/L
ISOPROPYLBENZENE	2.5	U	U	0.65	2.5	UG/L
M,P-XYLENE	6.5	U	U	1.1	6.5	UG/L
METHYLENE CHLORIDE	3.3	R	U	1.05	1.5	UG/L
METHYLENE CHLORIDE	3.3	R	U	1.05	1.5	UG/L
METHYLENE CHLORIDE	3.3	R	U	1.05	1.5	UG/L
METHYLENE CHLORIDE	3.3	R	U	1.05	1.5	UG/L
N-BUTYLBENZENE	5.5	U	U	0.55	5.5	UG/L
N-PROPYLBENZENE	2	U	U	0.45	2	UG/L
NAPHTHALENE	2	U	U	0.6	2	UG/L
O-XYLENE	5.5	U	U	0.65	5.5	UG/L
P-ISOPROPYLtolUENE	6	U	U	0.45	6	UG/L
SEC-BUTYLBENZENE	6.5	U	U	0.6	6.5	UG/L
STYRENE	2	U	U	0.6	2	UG/L

CCVMissi

CCVMissi

CCVMissi

CV%D

CV%D

CCVMissi

BS%R

CV%D

IC%RSI

SSCCV%

6521245

9712205 SW8260A

Page 10 of 13

TERT-BUTYLBENZENE	7	U	U	0.65	7	UG/L
TETRACHLOROETHENE	7	U	U	0.85	7	UG/L
TOLUENE	5.5	U	U	0.7	5.5	UG/L
TOLUENE-D8	111			0.5	0.5	ERCEN
TRANS-1,2-DICHLOROETHENE	30			0.45	3	UG/L
TRANS-1,3-DICHLOROPROPENE	5	U	U	0.85	5	UG/L
TRICHLOROETHENE	120			0.5	5	UG/L
TRICHLOROFLUOROMETHANE	4	R	U	1.1	4	UG/L
VINYL CHLORIDE	5.5	R	U	0.8	5.5	UG/L

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA085	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.148	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	U	U	0.16	1	UG/L	
	1,1-DICHLOROETHANE	0.4	U	U	0.11	0.4	UG/L	
	1,1-DICHLOROETHENE	1.2	U	U	0.15	1.2	UG/L	
	1,1-DICHLOROPROPENE	1	U	U	0.14	1	UG/L	
	1,2,3-TRICHLOROBENZENE	0.3	U	U	0.15	0.3	UG/L	
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	U	U	0.13	0.4	UG/L	
	1,2,4-TRIMETHYLBENZENE	1.3	U	U	0.09	1.3	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	2.6	U	U	0.25	2.6	UG/L	
	1,2-DIBROMOETHANE	0.6	U	U	0.19	0.6	UG/L	
	1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
	1,2-DICHLOROETHANE	0.6	U	U	0.33	0.6	UG/L	
	1,2-DICHLOROPROPANE	0.4	U	U	0.09	0.4	UG/L	
	1,3,5-TRIMETHYLBENZENE	0.5	U	U	0.1	0.5	UG/L	
	1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
	1,3-DICHLOROPROPANE	0.4	U	U	0.15	0.4	UG/L	
	1,4-DICHLOROBENZENE	0.3	U	U	0.12	0.3	UG/L	
	1-CHLOROHEXANE	0.5	R	U	0.14	0.5	UG/L	CCVMiss
	2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L	
	2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	
	4-BROMOFLUOROBENZENE	112			0.1	0.1	ERCEN	
	4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L	
	BENZENE	0.4	U	U	0.1	0.4	UG/L	
	BROMOBENZENE	0.3	U	U	0.09	0.3	UG/L	
	BROMOCHLOROMETHANE	0.4	U	U	0.18	0.4	UG/L	
	BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L	
	BROMOFORM	1.2	U	U	0.18	1.2	UG/L	
	BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	CCVMiss
	CARBON TETRACHLORIDE	2.1	U	U	0.16	2.1	UG/L	
	CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	
	CHLOROETHANE	1	R	U	0.3	1	UG/L	CCVMiss
	CHLOROFORM	0.3	U	U	0.15	0.3	UG/L	
	CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	CCVMiss
	CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	CV%D
	CIS-1,2-DICHLOROETHENE	1.2	U	U	0.08	1.2	UG/L	
	CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L	
	DIBROMOCHLOROMETHANE	0.5	U	U	0.16	0.5	UG/L	
	DIBROMOFLUOROMETHANE	106			0.1	0.1	ERCEN	
	DIBROMOMETHANE	2.4	U	U	0.2	2.4	UG/L	
	DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L	CCVMiss
	DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L	CV%D

6521246

9712205 SW8260A

Page 11 of 13

ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L
HEXACHLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L
ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L
M,P-XYLENE	1.3	U	U	0.22	1.3	UG/L
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L
N-BUTYLBENZENE	1.1	U	U	0.11	1.1	UG/L
N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L
NAPHTHALENE	0.4	U	U	0.12	0.4	UG/L
O-XYLENE	1.1	U	U	0.13	1.1	UG/L
P-ISOPROPYLtolUENE	1.2	U	U	0.09	1.2	UG/L
SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L
STYRENE	0.4	U	U	0.12	0.4	UG/L
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L
TETRACHLOROETHENE	1.4	U	U	0.17	1.4	UG/L
TOLUENE	1.1	U	U	0.14	1.1	UG/L
TOLUENE-D8	112			0.1	0.1	ERCEN
TRANS-1,2-DICHLOROETHENE	0.6	U	U	0.09	0.6	UG/L
TRANS-1,3-DICHLOROPROPENE	1	U	U	0.17	1	UG/L
TRICHLOROETHENE	1	U	U	0.1	1	UG/L
TRICHLOROFLUOROMETHANE	0.8	R	U	0.22	0.8	UG/L
VINYL CHLORIDE	11	R	U	0.16	1.1	UG/L

CCVMissi
CCVMissi

6521247

9712205 SW8260A

Page 12 of 13

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not requested
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Tnp blank
TB<RL	Tnp blank concentration less than RL
TB>RL	Tnp blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

6521249

NAS FW JRB AOC 2

Data Quality Evaluation



CH2MHILL

SDG 9712227 Method SW8260A

Reviewer nh Date 4/1/98 Matrix water

Senior Review Vito D'Aurora

Field Samples Due to the high concentration of target analytes, samples 5-8 and 10 were analyzed at a higher dilution.

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
-----------------	------------------	-----------------	------------------	-----------------	------------------

Water

AHA086TB1	TB	AHA087EB1	EB	AHA088AB1	AB
AHA089	N	AHA090	N	AHA091	N
AHA092	N	AHA093	N	AHA094	N
AHA095	N	AHA095MS1	MS	AHA095SD1	SD
AHA096FD1	FD	LABQC	BD		

1. Case Narrative**Items of Interest**

1. Methylene Chloride was detected > the RL in the method blank. This compound was detected < the calculated value in samples 2, 3, 5 and 6, so the data were flagged U (by the lab). The compound was detected > the calculated value in samples 7, 8, 10 and 11; therefore, the samples were not flagged.
2. Methylene Chloride exceeded the criteria in the LCS.
3. Thirteen compounds exceeded the MS/MSD criteria. The recoveries of these compounds in the LCS/LCD were within CLs, which demonstrated the spike outliers in the matrix spikes were due to matrix effects, so no further action is needed.
4. Due to the high concentration of target analytes, samples 5-8 and 10 were analyzed at a higher dilution.
5. Several compounds from the ICV/CCV order curve were within the acceptance limit but exceeded the 15% RSD criteria. These were quantitated using the average response factor due to software problem.

2. Blank Summary

Field Blanks Chloroform was detected above the RL in the Trip blank; however, the samples were below the calculated value and marked U (by the lab). No flagging

6521250

9712227 SW8260A

Page 2 of 19

necessary.

Method Blanks 1. Methylene Chloride was detected > the RL in the method blank. This compound was detected < the calculated value in samples 2, 3, 5 and 6, so the data were flagged U (by the lab). The compound was detected > the calculated value in samples 7, 8, 10 and 11; therefore, the samples were not validated.

<u>Blank Type</u>	<u>Blank ID</u>	<u>Analyte</u>	<u>Result</u>	<u>ReportLimit</u>	<u>LabFlag</u>	<u>Units</u>
LB	LABQC	METHYLENE CHLORI	0.72	0.21		UG/L
TB	AHA086TB1	CHLOROFORM	0.84	0.15		UG/L

3. Spikes and Duplicates

Field Duplicates Methylene Chloride, cis-1,2-Dichloroethene and Trichloroethene were detected > the RL; however, the RPDs were not exceeded.

Laboratory Duplicates None

Matrix Spike Thirteen compounds exceeded the MS/MSD % recovery criteria and one exceeded the RPD criteria. Twelve instances of exceeding the UCL, the positives were validated with a J flag. Methylene Chloride which exceeded the LCL in both the MS/MSD were flagged J and UJ. 1,3,5-Trimethylbenzene exceeded the LCL in the MSD was flagged UJ. Styrene failed to produce a % recovery and the samples were flagged UJ. Trichloroethene exceeded the RPD and the samples were flagged J for positives.

Recovery

<u>Matrix</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>Analyte</u>	<u>Recovery</u>	<u>LowerLimit</u>	<u>UpperLimit</u>
WATER	MS	AHA095MS1	1,1-DICHLOROETHANE	126	72	125
WATER	MS	AHA095MS1	1,2-DICHLOROETHANE	146	68	127
WATER	MS	AHA095MS1	2,2-DICHLOROPROPANE	134	75	125
WATER	MS	AHA095MS1	BROMODICHLOROMETHA	126	75	125
WATER	MS	AHA095MS1	CARBON TETRACHLORID	134	62	125
WATER	MS	AHA095MS1	CIS-1,2-DICHLOROETHEN	129	75	125
WATER	MS	AHA095MS1	DIBROMOMETHANE	137	69	127
WATER	MS	AHA095MS1	METHYLENE CHLORIDE	64	75	125
WATER	MS	-AHA095MS1	TRANS-1,3-DICHLOROPRO	127	66	125
WATER	MS	AHA095MS1	TRICHLOROETHENE	128	71	125
WATER	MS	AHA095MS1	TRICHLOROFUOROMETH	140	67	125
WATER	SD	AHA095SD1	1,2-DICHLOROETHANE	130	68	127
WATER	SD	AHA095SD1	1,3,5-TRIMETHYLBENZEN	71	72	112
WATER	SD	AHA095SD1	METHYLENE CHLORIDE	62	75	125
WATER	SD	AHA095SD1	TRICHLOROFUOROMETH	135	67	125

6521251

9712227 SW8260A

Page 3 of 19

- 4. Laboratory Control Sample** Methylene Chloride exceeded the LCL criteria in the LCS. The positives were flagged J and non-detects flagged R.

<u>Matrix</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>Analyte</u>	<u>Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
WATER	BS	LABQC	METHYLENE CHLORIDE	71	75	125

- 5. Surrogates** All criteria were met.

- 6. Tuning and Mass Calibration** All criteria met.

- 7. Internal Standard** All internal standard recoveries were within acceptance criteria.

8. Calibration Information

- Initial Calibration** Methylene Chloride exceeded the % RSD in the ICAL from 12/29/97 and the samples were flagged R.

<u>Field ID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation Reason</u>
AHA089	METHYLENE CHLORIDE	R	IC%RSD
AHA090	METHYLENE CHLORIDE	R	IC%RSD
AHA091	METHYLENE CHLORIDE	R	IC%RSD
AHA092	METHYLENE CHLORIDE	R	IC%RSD
AHA093	METHYLENE CHLORIDE	R	IC%RSD
AHA094	METHYLENE CHLORIDE	R	IC%RSD
AHA095	METHYLENE CHLORIDE	R	IC%RSD
AHA096FD1	METHYLENE CHLORIDE	R	IC%RSD

- Continuing Calibration** 1. Dichlorodifluoromethane, Chloromethane and Methylene Chloride exceeded the 25% criteria in the CCV from 12/30/97. The samples were flagged R.
2. Seven compounds were missing from the second source CCV from 12/26/97. Methylene Chloride exceeded 25% of the expected value. The samples were validated with an R flag.

<u>Field ID</u>	<u>LabsampleID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation</u>
AHA089	9712227-4	CHLOROMETHANE	R	CV%D
AHA089	9712227-4	DICHLORODIFLUOROMETHANE	R	CV%D
AHA089	9712227-4	METHYLENE CHLORIDE	R	CV%D
AHA090	9712227-5	1-CHLOROHEXANE	R	CCVMiss
AHA090	9712227-5	BROMOMETHANE	R	CCVMiss
AHA090	9712227-5	CHLOROETHANE	R	CCVMiss

6521252

9712227 SW8260A

Page 4 of 19

AHA090	9712227-5	CHLOROMETHANE	R	CCVMiss
AHA090	9712227-5	CHLOROMETHANE	R	CV%D
AHA090	9712227-5	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA090	9712227-5	DICHLORODIFLUOROMETHANE	R	CV%D
AHA090	9712227-5	METHYLENE CHLORIDE	R	CV%D
AHA090	9712227-5	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA090	9712227-5	VINYL CHLORIDE	R	CCVMiss
AHA091	9712227-6	1-CHLOROHEXANE	R	CCVMiss
AHA091	9712227-6	BROMOMETHANE	R	CCVMiss
AHA091	9712227-6	CHLOROETHANE	R	CCVMiss
AHA091	9712227-6	CHLOROMETHANE	R	CCVMiss
AHA091	9712227-6	CHLOROMETHANE	R	CV%D
AHA091	9712227-6	DICHLORODIFLUOROMETHANE	R	CV%D
AHA091	9712227-6	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA091	9712227-6	METHYLENE CHLORIDE	R	CV%D
AHA091	9712227-6	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA091	9712227-6	VINYL CHLORIDE	R	CCVMiss
AHA092	9712227-7	1-CHLOROHEXANE	R	CCVMiss
AHA092	9712227-7	BROMOMETHANE	R	CCVMiss
AHA092	9712227-7	CHLOROETHANE	R	CCVMiss
AHA092	9712227-7	CHLOROMETHANE	R	CV%D
AHA092	9712227-7	CHLOROMETHANE	R	CCVMiss
AHA092	9712227-7	DICHLORODIFLUOROMETHANE	R	CV%D
AHA092	9712227-7	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA092	9712227-7	METHYLENE CHLORIDE	R	CV%D
AHA092	9712227-7	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA092	9712227-7	VINYL CHLORIDE	R	CCVMiss
AHA093	9712227-8	1-CHLOROHEXANE	R	CCVMiss
AHA093	9712227-8	BROMOMETHANE	R	CCVMiss
AHA093	9712227-8	CHLOROETHANE	R	CCVMiss
AHA093	9712227-8	CHLOROMETHANE	R	CCVMiss
AHA093	9712227-8	CHLOROMETHANE	R	CV%D
AHA093	9712227-8	DICHLORODIFLUOROMETHANE	R	CV%D
AHA093	9712227-8	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA093	9712227-8	METHYLENE CHLORIDE	R	CV%D
AHA093	9712227-8	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA093	9712227-8	VINYL CHLORIDE	R	CCVMiss
AHA094	9712227-9	1-CHLOROHEXANE	R	CCVMiss
AHA094	9712227-9	BROMOMETHANE	R	CCVMiss
AHA094	9712227-9	CHLOROETHANE	R	CCVMiss
AHA094	9712227-9	CHLOROMETHANE	R	CV%D
AHA094	9712227-9	CHLOROMETHANE	R	CCVMiss
AHA094	9712227-9	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA094	9712227-9	DICHLORODIFLUOROMETHANE	R	CV%D
AHA094	9712227-9	METHYLENE CHLORIDE	R	CV%D

AHA094	9712227-9	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA094	9712227-9	VINYL CHLORIDE	R	CCVMiss
AHA095	9712227-10	1-CHLOROHEXANE	R	CCVMiss
AHA095	9712227-10	BROMOMETHANE	R	CCVMiss
AHA095	9712227-10	CHLOROETHANE	R	CCVMiss
AHA095	9712227-10	CHLOROMETHANE	R	CV%D
AHA095	9712227-10	CHLOROMETHANE	R	CCVMiss
AHA095	9712227-10	DICHLORODIFLUOROMETHANE	R	CV%D
AHA095	9712227-10	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA095	9712227-10	METHYLENE CHLORIDE	R	CV%D
AHA095	9712227-10	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA095	9712227-10	VINYL CHLORIDE	R	CCVMiss
AHA096FD1	9712227-11	1-CHLOROHEXANE	R	CCVMiss
AHA096FD1	9712227-11	BROMOMETHANE	R	CCVMiss
AHA096FD1	9712227-11	CHLOROETHANE	R	CCVMiss
AHA096FD1	9712227-11	CHLOROMETHANE	R	CV%D
AHA096FD1	9712227-11	CHLOROMETHANE	R	CCVMiss
AHA096FD1	9712227-11	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA096FD1	9712227-11	DICHLORODIFLUOROMETHANE	R	CV%D
AHA096FD1	9712227-11	METHYLENE CHLORIDE	R	CV%D
AHA096FD1	9712227-11	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA096FD1	9712227-11	VINYL CHLORIDE	R	CCVMiss

9. Holding Time

Holding times were met.

10. Summary

- General Comments**
1. Methylene Chloride exceeded the LCL criteria in the LCS. The positives were flagged J and non-detects flagged R.
 2. Methylene Chloride exceeded the % RSD in the ICAL from 12/29/97 and the samples were flagged R.
 3. Dichlorodifluoromethane, Chloromethane and Methylene Chloride exceeded the 25% criteria in the CCV from 12/30/97. The samples were flagged R.
 4. Seven compounds were missing from the second source CCV from 12/26/97. Methylene Chloride exceeded 25% of the expected value. The samples were validated with an R flag.
 5. Thirteen compounds exceeded the MS/MSD % recovery criteria and one exceeded the RPD criteria. Twelve instances of exceeding the UCL, the positives were validated with a J flag. Methylene Chloride which exceeded the LCL in both the MS/MSD were flagged J and UJ. 1,3,5-Trimethylbenzene exceeded the LCL in the MSD was flagged UJ. Styrene failed to produce a % recovery and the samples were flagged UJ. Trichloroethene exceeded the RPD and the samples were flagged J for positives.

Data Package Completeness Six instances noted where the Edata % recovery and the hard copy did not match. The Edata was changed to match the hard copy.

6521254

9712227 SW8260A

Page 6 of 19

Forms Review/ Items of Interest **Due to the high concentration of target analytes, samples 5-8 and 10 were analyzed at a higher dilution**

COC Review **Complete**

PWS152
6521255

9712227 SW8260A

Page 7 of 19

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA089	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.148	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	U	U	0.16	1	UG/L	
	1,1-DICHLOROETHANE	0.4	UJ	U	0.11	0.4	UG/L	MS%R
	1,1-DICHLOROETHENE	1.2	U	U	0.15	1.2	UG/L	
	1,1-DICHLOROPROPENE	1	U	U	0.14	1	UG/L	
	1,2,3-TRICHLOROBENZENE	0.3	U	U	0.15	0.3	UG/L	
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	U	U	0.13	0.4	UG/L	
	1,2,4-TRIMETHYLBENZENE	1.3	U	U	0.09	1.3	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	2.6	U	U	0.25	2.6	UG/L	
	1,2-DIBROMOETHANE	0.6	U	U	0.19	0.6	UG/L	
	1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
	1,2-DICHLOROETHANE	0.6	UJ	U	0.33	0.6	UG/L	MS%R
	1,2-DICHLOROPROPANE	0.4	U	U	0.09	0.4	UG/L	SD%R
	1,3,5-TRIMETHYLBENZENE	0.5	UJ	U	0.1	0.5	UG/L	SD%R
	1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
	1,3-DICHLOROPROPANE	0.4	U	U	0.15	0.4	UG/L	
	1,4-DICHLOROBENZENE	0.3	U	U	0.12	0.3	UG/L	
	1-CHLOROHEXANE	0.5	U	U	0.14	0.5	UG/L	
	2,2-DICHLOROPROPANE	3.5	UJ	U	0.32	3.5	UG/L	MS%R
	2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	
	4-BROMOFLUOROBENZENE	107			0.1	0.1	ERCEN	
	4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L	
	BENZENE	0.31	F	F	0.1	0.4	UG/L	
	BROMOBENZENE	0.3	U	U	0.09	0.3	UG/L	
	BROMOCHLOROMETHANE	0.4	U	U	0.18	0.4	UG/L	
	BROMODICHLOROMETHANE	0.8	UJ	U	0.1	0.8	UG/L	MS%R
	BROMOFORM	1.2	U	U	0.18	1.2	UG/L	
	BROMOMETHANE	1.1	U	U	0.2	1.1	UG/L	
	CARBON TETRACHLORIDE	2.1	UJ	U	0.16	2.1	UG/L	MS%R
	CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	
	CHLOROETHANE	1	U	U	0.3	1	UG/L	
	CHLOROFORM	0.3	U	U	0.15	0.3	UG/L	
	CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	CV%D
	CIS-1,2-DICHLOROETHENE	14	J		0.08	1.2	UG/L	MS%R
	CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L	
	DIBROMOCHLOROMETHANE	0.5	U	U	0.16	0.5	UG/L	
	DIBROMOFLUOROMETHANE	112			0.1	0.1	ERCEN	
	DIBROMOMETHANE	2.4	UJ	U	0.2	2.4	UG/L	MS%R
	DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L	CV%D
	ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L	
	HEXAChLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L	
	ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L	
	M,P-XYLENE	1.3	U	U	0.22	1.3	UG/L	

6521256

9712227 SW8260A

Page 8 of 19

METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BS%R
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	CV%D
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	IC%RSI
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	SSCCV%
N-BUTYLBENZENE	1.1	U	U	0.11	1.1	UG/L	
N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L	
NAPHTHALENE	0.4	U	U	0.12	0.4	UG/L	
O-XYLENE	1.1	U	U	0.13	1.1	UG/L	
P-ISOPROPYLtolUENE	1.2	U	U	0.09	1.2	UG/L	
SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L	
STYRENE	0.4	UJ	U	0.12	0.4	UG/L	MS%R
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L	
TETRACHLOROETHENE	1.4	U	U	0.17	1.4	UG/L	
TOLUENE	1.1	U	U	0.14	1.1	UG/L	
TOLUENE-D8	117			0.1	0.1	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.5	F	F	0.09	0.6	UG/L	
TRANS-1,3-DICHLOROPROPENE	1	UJ	U	0.17	1	UG/L	MS%R
TRICHLOROETHENE	1	J		0.1	1	UG/L	MS%R
TRICHLOROETHENE	1	J		0.1	1	UG/L	MSRPC
TRICHLOROFLUOROMETHANE	0.8	UJ	U	0.22	0.8	UG/L	MS%R
TRICHLOROFLUOROMETHANE	0.8	UJ	U	0.22	0.8	UG/L	SD%R
VINYL CHLORIDE	1.1	U	U	0.16	1.1	UG/L	

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA090	1,1,1,2-TETRACHLOROETHANE	2.5	U	U	0.74	2.5	UG/L	
	1,1,1-TRICHLOROETHANE	4	U	U	0.65	4	UG/L	
	1,1,2,2-TETRACHLOROETHANE	2	U	U	0.85	2	UG/L	
	1,1,2-TRICHLOROETHANE	5	U	U	0.8	5	UG/L	
	1,1-DICHLOROETHANE	2	UJ	U	0.55	2	UG/L	MS%R
	1,1-DICHLOROETHENE	6	U	U	0.75	6	UG/L	
	1,1-DICHLOROPROPENE	5	U	U	0.7	5	UG/L	
	1,2,3-TRICHLOROBENZENE	15	U	U	0.75	15	UG/L	
	1,2,3-TRICHLOROPROPANE	16	U	U	0.75	16	UG/L	
	1,2,4-TRICHLOROBENZENE	2	U	U	0.65	2	UG/L	
	1,2,4-TRIMETHYLBENZENE	6.5	U	U	0.45	6.5	UG/L	
	2-DIBROMO-3-CHLOROPROPAN	13	U	U	1.25	13	UG/L	
	1,2-DIBROMOETHANE	3	U	U	0.95	3	UG/L	
	1,2-DICHLOROBENZENE	15	U	U	0.5	1.5	UG/L	
	1,2-DICHLOROETHANE	3	UJ	U	1.65	3	UG/L	MS%R
	1,2-DICHLOROETHANE	3	UJ	U	1.65	3	UG/L	SD%R
	1,2-DICHLOROPROPANE	2	U	U	0.45	2	UG/L	
	1,3,5-TRIMETHYLBENZENE	25	UJ	U	0.5	2.5	UG/L	SD%R
	1,3-DICHLOROBENZENE	6	U	U	0.25	6	UG/L	
	1,3-DICHLOROPROPANE	2	U	U	0.75	2	UG/L	
	1,4-DICHLOROBENZENE	1.5	U	U	0.6	1.5	UG/L	
	1-CHLOROHEXANE	2.5	R	U	0.7	2.5	UG/L	CCVMissi
	2,2-DICHLOROPROPANE	18	UJ	U	1.6	18	UG/L	MS%R
	2-CHLOROTOLUENE	2	U	U	0.5	2	UG/L	
	4-BROMOFLUOROBENZENE	108			0.5	0.5	ERCEN	
	4-CHLOROTOLUENE	3	U	U	0.4	3	UG/L	
	BENZENE	2	U	U	0.5	2	UG/L	
	BROMOBENZENE	1.5	U	U	0.45	1.5	UG/L	
	BROMOCHLOROMETHANE	2	U	U	0.9	2	UG/L	
	BROMODICHLOROMETHANE	4	UJ	U	0.5	4	UG/L	MS%R
	BROMOFORM	6	U	U	0.9	6	UG/L	

BROMOMETHANE	5.5	R	U	1	5.5	UG/L	CCVMissi
CARBON TETRACHLORIDE	11	UJ	U	0.8	11	UG/L	MS%R
CHLOROBENZENE	2	U	U	0.6	2	UG/L	
CHLOROETHANE	5	R	U	1.5	5	UG/L	CCVMissi
CHLOROFORM	1.5	U	U	0.75	1.5	UG/L	
CHLOROMETHANE	6.5	R	U	0.45	6.5	UG/L	CCVMissi
CHLOROMETHANE	6.5	R	U	0.45	6.5	UG/L	CV%D
CIS-1,2-DICHLOROETHENE	2	J	F	0.4	6	UG/L	MS%R
CIS-1,3-DICHLOROPROPENE	5	U	U	0.55	5	UG/L	
DIBROMOCHLOROMETHANE	2.5	U	U	0.8	2.5	UG/L	
DIBROMOFLUOROMETHANE	114			0.5	0.5	ERCEN	
DIBROMOMETHANE	12	UJ	U	1	12	UG/L	MS%R
DICHLORODIFLUOROMETHANE	5	R	U	1.8	5	UG/L	CCVMissi
DICHLORODIFLUOROMETHANE	5	R	U	1.8	5	UG/L	CV%D
ETHYLBENZENE	3	U	U	0.6	3	UG/L	
HEXACHLOROBUTADIENE	5.5	U	U	1	5.5	UG/L	
ISOPROPYLBENZENE	2.5	U	U	0.65	2.5	UG/L	
M,P-XYLENE	6.5	U	U	1.1	6.5	UG/L	
METHYLENE CHLORIDE	5.1	R	U	1.05	1.5	UG/L	BS%R
METHYLENE CHLORIDE	5.1	R	U	1.05	1.5	UG/L	CV%D
METHYLENE CHLORIDE	5.1	R	U	1.05	1.5	UG/L	IC%RSI
METHYLENE CHLORIDE	5.1	R	U	1.05	1.5	UG/L	SSCCV%
N-BUTYLBENZENE	5.5	U	U	0.55	5.5	UG/L	
N-PROPYLBENZENE	2	U	U	0.45	2	UG/L	
NAPHTHALENE	2	U	U	0.6	2	UG/L	
O-XYLENE	5.5	U	U	0.65	5.5	UG/L	
P-ISOPROPYLtolUENE	6	U	U	0.45	6	UG/L	
SEC-BUTYLBENZENE	6.5	U	U	0.6	6.5	UG/L	
STYRENE	2	UJ	U	0.6	2	UG/L	MS%R
TERT-BUTYLBENZENE	7	U	U	0.65	7	UG/L	
TETRACHLOROETHENE	7	U	U	0.85	7	UG/L	
TOLUENE	5.5	U	U	0.7	5.5	UG/L	
TOLUENE-D8	112			0.5	0.5	ERCEN	
TRANS-1,2-DICHLOROETHENE	3	U	U	0.45	3	UG/L	
TRANS-1,3-DICHLOROPROPENE	5	UJ	U	0.85	5	UG/L	MS%R
TRICHLOROETHENE	120	J		0.5	5	UG/L	MSRPD
TRICHLOROETHENE	120	J		0.5	5	UG/L	MS%R
TRICHLOROFLUOROMETHANE	4	R	U	1.1	4	UG/L	CCVMissi
VINYL CHLORIDE	5.5	R	U	0.8	5.5	UG/L	CCVMissi

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA091	1,1,1,2-TETRACHLOROETHANE	2.5	U	U	0.74	2.5	UG/L	
	1,1,1-TRICHLOROETHANE	4	U	U	0.65	4	UG/L	
	1,1,2,2-TETRACHLOROETHANE	2	U	U	0.85	2	UG/L	
	1,1,2-TRICHLOROETHANE	5	U	U	0.8	5	UG/L	
	1,1-DICHLOROETHANE	2	UJ	U	0.55	2	UG/L	MS%R
	1,1-DICHLOROETHENE	6	U	U	0.75	6	UG/L	
	1,1-DICHLOROPROPENE	5	U	U	0.7	5	UG/L	
	1,2,3-TRICHLOROBENZENE	1.5	U	U	0.75	1.5	UG/L	
	1,2,3-TRICHLOROPROPANE	16	U	U	0.75	16	UG/L	
	1,2,4-TRICHLOROBENZENE	2	U	U	0.65	2	UG/L	
	1,2,4-TRIMETHYLBENZENE	6.5	U	U	0.45	6.5	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	13	U	U	1.25	13	UG/L	
	1,2-DIBROMOETHANE	3	U	U	0.95	3	UG/L	
	1,2-DICHLOROBENZENE	1.5	U	U	0.5	1.5	UG/L	

6521258

9712227 SW8260A

Page 10 of 19

1,2-DICHLOROETHANE	3	UJ	U	1.65	3	UG/L	SD%R
1,2-DICHLOROETHANE	3	UJ	U	1.65	3	UG/L	MS%R
1,2-DICHLOROPROPANE	2	U	U	0.45	2	UG/L	
1,3,5-TRIMETHYLBENZENE	2.5	UJ	U	0.5	2.5	UG/L	SD%R
1,3-DICHLOROBENZENE	6	U	U	0.25	6	UG/L	
1,3-DICHLOROPROPANE	2	U	U	0.75	2	UG/L	
1,4-DICHLOROBENZENE	1.5	U	U	0.6	1.5	UG/L	
1-CHLOROHEXANE	2.5	R	U	0.7	2.5	UG/L	CCVMissi
2,2-DICHLOROPROPANE	18	UJ	U	1.6	18	UG/L	MS%R
2-CHLOROTOLUENE	2	U	U	0.5	2	UG/L	
4-BROMOFLUOROBENZENE	115			0.5	0.5	ERCEN	
4-CHLOROTOLUENE	3	U	U	0.4	3	UG/L	
BENZENE	2	U	U	0.5	2	UG/L	
BROMOBENZENE	1.5	U	U	0.45	1.5	UG/L	
BROMOCHLOROMETHANE	2	U	U	0.9	2	UG/L	
BROMODICHLOROMETHANE	4	UJ	U	0.5	4	UG/L	MS%R
BROMOFORM	6	U	U	0.9	6	UG/L	
BROMOMETHANE	5.5	R	U	1	5.5	UG/L	CCVMissi
CARBON TETRACHLORIDE	11	UJ	U	0.8	11	UG/L	MS%R
CHLOROBENZENE	2	U	U	0.6	2	UG/L	
CHLOROETHANE	5	R	U	1.5	5	UG/L	CCVMissi
CHLOROFORM	1.5	U	U	0.75	1.5	UG/L	
CHLOROMETHANE	6.5	R	U	0.45	6.5	UG/L	CCVMissi
CHLOROMETHANE	6.5	R	U	0.45	6.5	UG/L	CV%D
CIS-1,2-DICHLOROETHENE	3.7	J	F	0.4	6	UG/L	MS%R
CIS-1,3-DICHLOROPROPENE	5	U	U	0.55	5	UG/L	
DIBROMOCHLOROMETHANE	2.5	U	U	0.8	2.5	UG/L	
DIBROMOFLUOROMETHANE	104			0.5	0.5	ERCEN	
DIBROMOMETHANE	12	UJ	U	1	12	UG/L	MS%R
DICHLORODIFLUOROMETHANE	5	R	U	1.8	5	UG/L	CCVMissi
DICHLORODIFLUOROMETHANE	5	R	U	1.8	5	UG/L	CV%D
ETHYLBENZENE	3	U	U	0.6	3	UG/L	
HEXAChLOROBUTADIENE	5.5	U	U	1	5.5	UG/L	
ISOPROPYLBENZENE	2.5	U	U	0.65	2.5	UG/L	
M,P-XYLENE	6.5	U	U	1.1	6.5	UG/L	
METHYLENE CHLORIDE	4.1	R	U	1.05	1.5	UG/L	BS%R
METHYLENE CHLORIDE	4.1	R	U	1.05	1.5	UG/L	CV%D
METHYLENE CHLORIDE	4.1	R	U	1.05	1.5	UG/L	IC%RSE
METHYLENE CHLORIDE	4.1	R	U	1.05	1.5	UG/L	SSCCV%
N-BUTYLBENZENE	5.5	U	U	0.55	5.5	UG/L	
N-PROPYLBENZENE	2	U	U	0.45	2	UG/L	
NAPHTHALENE	2	U	U	0.6	2	UG/L	
O-XYLENE	5.5	U	U	0.65	5.5	UG/L	
P-ISOPROPYLtolUENE	6	U	U	0.45	6	UG/L	
SEC-BUTYLBENZENE	6.5	U	U	0.6	6.5	UG/L	
STYRENE	2	UJ	U	0.6	2	UG/L	MS%R
TERT-BUTYLBENZENE	7	U	U	0.65	7	UG/L	
TETRAChLOROETHENE	8.1			0.85	7	UG/L	
TOLUENE	5.5	U	U	0.7	5.5	UG/L	
TOLUENE-D8	114			0.5	0.5	ERCEN	
TRANS-1,2-DICHLOROETHENE	3	U	U	0.45	3	UG/L	
TRANS-1,3-DICHLOROPROPENE	5	UJ	U	0.85	5	UG/L	MS%R
TRICHLOROETHENE	150	J		0.5	5	UG/L	MS%R
TRICHLOROETHENE	150	J		0.5	5	UG/L	MSRPC
TRICHLOROFUOROMETHANE	4	R	U	1.1	4	UG/L	CCVMissi
VINYL CHLORIDE	5.5	R	U	0.8	5.5	UG/L	CCVMissi

113500

9712227 SW8260A

6521250

Page 11 of 19

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA092	1,1,1,2-TETRACHLOROETHANE	13	U	U	3.7	13	UG/L	
	1,1,1-TRICHLOROETHANE	20	U	U	3.25	20	UG/L	
	1,1,2,2-TETRACHLOROETHANE	10	U	U	4.25	10	UG/L	
	1,1,2-TRICHLOROETHANE	25	U	U	4	25	UG/L	
	1,1-DICHLOROETHANE	10	UJ	U	2.75	10	UG/L	MS%R
	1,1-DICHLOROETHENE	30	U	U	3.75	30	UG/L	
	1,1-DICHLOROPROPENE	25	U	U	3.5	25	UG/L	
	1,2,3-TRICHLOROBENZENE	7.5	U	U	3.75	7.5	UG/L	
	1,2,3-TRICHLOROPROPANE	80	U	U	3.75	80	UG/L	
	1,2,4-TRICHLOROBENZENE	10	U	U	3.25	10	UG/L	
	1,2,4-TRIMETHYLBENZENE	33	U	U	2.25	33	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	65	U	U	6.25	65	UG/L	
	1,2-DIBROMOETHANE	15	U	U	4.75	15	UG/L	
	1,2-DICHLOROBENZENE	7.5	U	U	2.5	7.5	UG/L	
	1,2-DICHLOROETHANE	15	UJ	U	8.25	15	UG/L	SD%R
	1,2-DICHLOROETHANE	15	UJ	U	8.25	15	UG/L	MS%R
	1,2-DICHLOROPROPANE	10	U	U	2.25	10	UG/L	
	1,3,5-TRIMETHYLBENZENE	13	UJ	U	2.5	13	UG/L	SD%R
	1,3-DICHLOROBENZENE	30	U	U	1.25	30	UG/L	
	1,3-DICHLOROPROPANE	10	U	U	3.75	10	UG/L	
	1,4-DICHLOROBENZENE	7.5	U	U	3	7.5	UG/L	
	1-CHLOROHEXANE	13	R	U	3.5	13	UG/L	CCVMiss
	2,2-DICHLOROPROPANE	88	UJ	U	8	88	UG/L	MS%R
	2-CHLOROTOLUENE	10	U	U	2.5	10	UG/L	
	4-BROMOFLUOROBENZENE	115			2.5	2.5	ERCEN	
	4-CHLORTOLUENE	15	U	U	2	15	UG/L	
	BENZENE	10	U	U	2.5	10	UG/L	
	BROMOBENZENE	7.5	U	U	2.25	7.5	UG/L	
	BROMOCHLOROMETHANE	10	U	U	4.5	10	UG/L	
	BROMODICHLOROMETHANE	20	UJ	U	2.5	20	UG/L	MS%R
	BROMOFORM	30	U	U	4.5	30	UG/L	
	BROMOMETHANE	28	R	U	5	28	UG/L	CCVMiss
	CARBON TETRACHLORIDE	53	UJ	U	4	53	UG/L	MS%R
	CHLOROBENZENE	10	U	U	3	10	UG/L	
	CHLOROETHANE	25	R	U	7.5	25	UG/L	CCVMiss
	CHLOROFORM	7.5	U	U	3.75	7.5	UG/L	
	CHLOROMETHANE	33	R	U	2.25	33	UG/L	CV%D
	CHLOROMETHANE	33	R	U	2.25	33	UG/L	CCVMiss
	CIS-1,2-DICHLOROETHENE	34	J	U	2	30	UG/L	MS%R
	CIS-1,3-DICHLOROPROPENE	25	U	U	2.75	25	UG/L	
	DIBROMOCHLOROMETHANE	13	U	U	4	13	UG/L	
	DIBROMOFLUOROMETHANE	111			2.5	2.5	ERCEN	
	DIBROMOMETHANE	60	UJ	U	5	60	UG/L	MS%R
	DICHLORODIFLUOROMETHANI	25	R	U	9	25	UG/L	CCVMiss
	DICHLORODIFLUOROMETHANI	25	R	U	9	25	UG/L	CV%D
	ETHYLBENZENE	15	U	U	3	15	UG/L	
	HEXAChLOROBUTADIENE	28	U	U	5	28	UG/L	
	ISOPROPYLBENZENE	13	U	U	3.25	13	UG/L	
	M,P-XYLENE	33	U	U	5.5	33	UG/L	
	METHYLENE CHLORIDE	23	R		5.25	7.5	UG/L	CV%D
	METHYLENE CHLORIDE	23	R		5.25	7.5	UG/L	IC%RSI
	METHYLENE CHLORIDE	23	R		5.25	7.5	UG/L	SSCCV%
	N-BUTYLBENZENE	28	U	U	2.75	28	UG/L	

6521260

9712227 SW8260A

Page 12 of 19

N-PROPYLBENZENE	10	U	U	2.25	10	UG/L	
NAPHTHALENE	10	U	U	3	10	UG/L	
O-XYLENE	28	U	U	3.25	28	UG/L	
P-ISOPROPYLtolUENE	30	U	U	2.25	30	UG/L	
SEC-BUTYLBENZENE	33	U	U	3	33	UG/L	
STYRENE	10	UJ	U	3	10	UG/L	MS%R
TERT-BUTYLBENZENE	35	U	U	3.25	35	UG/L	
TETRACHLOROETHENE	35	U	U	4.25	35	UG/L	
TOLUENE	28	U	U	3.5	28	UG/L	
TOLUENE-D8	111			2.5	2.5	ERCEN	
TRANS-1,2-DICHLOROETHENE	15	U	U	2.25	15	UG/L	
TRANS-1,3-DICHLOROPROPENE	25	UJ	U	4.25	25	UG/L	MS%R
TRICHLOROETHENE	620	J		2.5	25	UG/L	MSRPC
TRICHLOROETHENE	620	J		2.5	25	UG/L	MS%R
TRICHLOROFLUOROMETHANE	20	R	U	5.5	20	UG/L	CCVMissi
VINYL CHLORIDE	28	R	U	4	28	UG/L	CCVMissi

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA093	1,1,1,2-TETRACHLOROETHANE	13	U	U	3.7	13	UG/L	
	1,1,1-TRICHLOROETHANE	20	U	U	3.25	20	UG/L	
	1,1,2,2-TETRACHLOROETHANE	10	U	U	4.25	10	UG/L	
	1,1,2-TRICHLOROETHANE	25	U	U	4	25	UG/L	
	1,1-DICHLOROETHANE	10	UJ	U	2.75	10	UG/L	MS%R
	1,1-DICHLOROETHENE	30	U	U	3.75	30	UG/L	
	1,1-DICHLOROPROPENE	25	U	U	3.5	25	UG/L	
	1,2,3-TRICHLOROBENZENE	7.5	U	U	3.75	7.5	UG/L	
	1,2,3-TRICHLOROPROPANE	80	U	U	3.75	80	UG/L	
	1,2,4-TRICHLOROBENZENE	10	U	U	3.25	10	UG/L	
	1,2,4-TRIMETHYLBENZENE	33	U	U	2.25	33	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	65	U	U	6.25	65	UG/L	
	1,2-DIBROMOETHANE	15	U	U	4.75	15	UG/L	
	1,2-DICHLOROBENZENE	-7.5	U	U	2.5	7.5	UG/L	
	1,2-DICHLOROETHANE	15	UJ	U	8.25	15	UG/L	MS%R
	1,2-DICHLOROETHANE	15	UJ	U	8.25	15	UG/L	SD%R
	1,2-DICHLOROPROPANE	10	U	U	2.25	10	UG/L	
	1,3,5-TRIMETHYLBENZENE	13	UJ	U	2.5	13	UG/L	SD%R
	1,3-DICHLOROBENZENE	30	U	U	1.25	30	UG/L	
	1,3-DICHLOROPROPANE	10	U	U	3.75	10	UG/L	
	1,4-DICHLOROBENZENE	7.5	U	U	3	7.5	UG/L	
	1-CHLOROHEXANE	13	R	U	3.5	13	UG/L	CCVMissi
	2,2-DICHLOROPROPANE	88	UJ	U	8	88	UG/L	MS%R
	2-CHLOROTOLUENE	10	U	U	2.5	10	UG/L	
	4-BROMOFLUOROBENZENE	111			2.5	2.5	ERCEN	
	4-CHLOROTOLUENE	15	U	U	2	15	UG/L	
	BENZENE	10	U	U	2.5	10	UG/L	
	BROMOBENZENE	7.5	U	U	2.25	7.5	UG/L	
	BROMOCHLOROMETHANE	10	U	U	4.5	10	UG/L	MS%R
	BROMODICHLOROMETHANE	20	UJ	U	2.5	20	UG/L	
	BROMOFORM	30	U	U	4.5	30	UG/L	
	BROMOMETHANE	28	R	U	5	28	UG/L	CCVMissi
	CARBON TETRACHLORIDE	53	UJ	U	4	53	UG/L	MS%R
	CHLOROBENZENE	10	U	U	3	10	UG/L	
	CHLOROETHANE	25	R	U	7.5	25	UG/L	CCVMissi
	CHLOROFORM	7.5	U	U	3.75	7.5	UG/L	
	CHLOROMETHANE	33	R	U	2.25	33	UG/L	CCVMissi

CHLOROMETHANE	33	R	U	2.25	33	UG/L	CV%D
CIS-1,2-DICHLOROETHENE	9.5	J	F	2	30	UG/L	MS%R
CIS-1,3-DICHLOROPROPENE	25	U	U	2.75	25	UG/L	
DIBROMOCHLOROMETHANE	13	U	U	4	13	UG/L	
DIBROMOFLUOROMETHANE	111			2.5	2.5	ERCEN	
DIBROMOMETHANE	60	UJ	U	5	60	UG/L	MS%R
DICHLORODIFLUOROMETHANE	25	R	U	9	25	UG/L	CV%D
DICHLORODIFLUOROMETHANE	25	R	U	9	25	UG/L	CCVMissi
ETHYLBENZENE	15	U	U	3	15	UG/L	
HEXACHLOROBUTADIENE	28	U	U	5	28	UG/L	
ISOPROPYLBENZENE	13	U	U	3.25	13	UG/L	
M,P-XYLENE	33	U	U	5.5	33	UG/L	
METHYLENE CHLORIDE	22	R		5.25	7.5	UG/L	IC%RSI
METHYLENE CHLORIDE	22	R		5.25	7.5	UG/L	SSCCV%
METHYLENE CHLORIDE	22	R		5.25	7.5	UG/L	CV%D
N-BUTYLBENZENE	28	U	U	2.75	28	UG/L	
N-PROPYLBENZENE	10	U	U	2.25	10	UG/L	
NAPHTHALENE	10	U	U	3	10	UG/L	
O-XYLENE	28	U	U	3.25	28	UG/L	
P-ISOPROPYLtolUENE	30	U	U	2.25	30	UG/L	
SEC-BUTYLBENZENE	33	U	U	3	33	UG/L	
STYRENE	10	UJ	U	3	10	UG/L	MS%R
TERT-BUTYLBENZENE	35	U	U	3.25	35	UG/L	
TETRACHLOROETHENE	35	U	U	4.25	35	UG/L	
TOLUENE	28	U	U	3.5	28	UG/L	
TOLUENE-D8	113			2.5	2.5	ERCEN	
TRANS-1,2-DICHLOROETHENE	15	U	U	2.25	15	UG/L	
TRANS-1,3-DICHLOROPROPENE	25	UJ	U	4.25	25	UG/L	MS%R
TRICHLOROETHENE	660	J		2.5	25	UG/L	MS%R
TRICHLOROETHENE	660	J		2.5	25	UG/L	MSRPE
TRICHLOROFLUOROMETHANE	20	R	U	—	5.5	20	UG/L
VINYL CHLORIDE	28	R	U	4	28	UG/L	CCVMissi
							CCVMissi

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA094	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.148	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	U	U	0.16	1	UG/L	
	1,1-DICHLOROETHANE	0.4	UJ	U	0.11	0.4	UG/L	MS%R
	1,1-DICHLOROETHENE	1.2	U	U	0.15	1.2	UG/L	
	1,1-DICHLOROPROPENE	1	U	U	0.14	1	UG/L	
	1,2,3-TRICHLOROBENZENE	0.3	U	U	0.15	0.3	UG/L	
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	U	U	0.13	0.4	UG/L	
	1,2,4-TRIMETHYLBENZENE	1.3	U	U	0.09	1.3	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	2.6	U	U	0.25	2.6	UG/L	
	1,2-DIBROMOETHANE	0.6	U	U	0.19	0.6	UG/L	
	1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
	1,2-DICHLOROETHANE	0.6	UJ	U	0.33	0.6	UG/L	SD%R
	1,2-DICHLOROETHANE	0.6	UJ	U	0.33	0.6	UG/L	MS%R
	1,2-DICHLOROPROPANE	0.4	U	U	0.09	0.4	UG/L	
	1,3,5-TRIMETHYLBENZENE	0.5	UJ	U	0.1	0.5	UG/L	SD%R
	1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
	1,3-DICHLOROPROPANE	0.4	U	U	0.15	0.4	UG/L	
	1,4-DICHLOROBENZENE	0.3	U	U	0.12	0.3	UG/L	

6521262

9712227 SW8260A

Page 14 of 19

I-CHLOROHEXANE	0.5	R	U	0.14	0.5	UG/L	CCVMissi
2,2-DICHLOROPROPANE	3.5	UJ	U	0.32	3.5	UG/L	MS%R
2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	
4-BROMOFLUOROBENZENE	108			0.1	0.1	ERCEN	
4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L	
BENZENE	0.4	U	U	0.1	0.4	UG/L	
BROMOBENZENE	0.3	U	U	0.09	0.3	UG/L	
BROMOCHLOROMETHANE	0.4	U	U	0.18	0.4	UG/L	
BROMODICHLOROMETHANE	0.8	UJ	U	0.1	0.8	UG/L	MS%R
BROMOFORM	1.2	U	U	0.18	1.2	UG/L	
BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	CCVMissi
CARBON TETRACHLORIDE	2.1	UJ	U	0.16	2.1	UG/L	MS%R
CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	
CHLOROETHANE	1	R	U	0.3	1	UG/L	CCVMissi
CHLOROFORM	0.3	U	U	0.15	0.3	UG/L	
CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	CCVMissi
CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	CV%D
CIS-1,2-DICHLOROETHENE	0.71	J	F	0.08	1.2	UG/L	MS%R
CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L	
DIBROMOCHLOROMETHANE	0.5	U	U	0.16	0.5	UG/L	
DIBROMOFLUOROMETHANE	109			0.1	0.1	ERCEN	
DIBROMOMETHANE	2.4	UJ	U	0.2	2.4	UG/L	MS%R
DICHLORODIFLUOROMETHANI	1	R	U	0.36	1	UG/L	CV%D
DICHLORODIFLUOROMETHANI	1	R	U	0.36	1	UG/L	CCVMissi
ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L	
HEXACHLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L	
ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L	
M,P-XYLENE	1.3	U	U	0.22	1.3	UG/L	
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BS%R
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	CV%D
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	IC%RSI
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	SSCCV%
N-BUTYLBENZENE	1.1	U	U	0.11	1	UG/L	
N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L	
NAPHTHALENE	0.4	U	U	0.12	0.4	UG/L	
O-XYLENE	1.1	U	U	0.13	1.1	UG/L	
P-ISOPROPYLtolUENE	1.2	U	U	0.09	1.2	UG/L	
SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L	
STYRENE	0.4	UJ	U	0.12	0.4	UG/L	MS%R
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L	
TETRACHLOROETHENE	1.8			0.17	1.4	UG/L	
TOLUENE	1.1	U	U	0.14	1.1	UG/L	
TOLUENE-D8	115			0.1	0.1	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.6	U	U	0.09	0.6	UG/L	
TRANS-1,3-DICHLOROPROPENE	1	UJ	U	0.17	1	UG/L	MS%R
TRICHLOROETHENE	26	J		0.1	1	UG/L	MS%R
TRICHLOROETHENE	26	J		0.1	1	UG/L	MSRPC
TRICLOROFLUOROMETHANE	0.8	R	U	0.22	0.8	UG/L	CCVMissi
VINYL CHLORIDE	1.1	R	U	0.16	1.1	UG/L	CCVMissi

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA095	1,1,1,2-TETRACHLOROETHANE	10	U	U	2.96	10	UG/L	
	1,1,1-TRICHLOROETHANE	16	U	U	2.6	16	UG/L	
	1,1,2,2-TETRACHLOROETHANE	8	U	U	3.4	8	UG/L	
	1,1,2-TRICHLOROETHANE	20	U	U	3.2	20	UG/L	

6521263

1,1-DICHLOROETHANE	8	UJ	U	2.2	8	UG/L	MS%R
1,1-DICHLOROETHENE	24	U	U	3	24	UG/L	
1,1-DICHLOROPROPENE	20	U	U	2.8	20	UG/L	
1,2,3-TRICHLOROBENZENE	6	U	U	3	6	UG/L	
1,2,3-TRICHLOROPROPANE	64	U	U	3	64	UG/L	
1,2,4-TRICHLOROBENZENE	8	U	U	2.6	8	UG/L	
1,2,4-TRIMETHYLBENZENE	26	U	U	1.8	26	UG/L	
2-DIBROMO-3-CHLOROPROPANE	52	U	U	5	52	UG/L	
1,2-DIBROMOETHANE	12	U	U	3.8	12	UG/L	
1,2-DICHLOROBENZENE	6	U	U	2	6	UG/L	
1,2-DICHLOROETHANE	12	UJ	U	6.6	12	UG/L	SD%R
1,2-DICHLOROPROPANE	12	UJ	U	6.6	12	UG/L	MS%R
1,2,3-TRIMETHYLBENZENE	8	U	U	1.8	8	UG/L	
1,3,5-TRIMETHYLBENZENE	10	UJ	U	2	10	UG/L	SD%R
1,3-DICHLOROBENZENE	24	U	U	1	24	UG/L	
1,3-DICHLOROPROPANE	8	U	U	3	8	UG/L	
1,4-DICHLOROBENZENE	6	U	U	2.4	6	UG/L	
1-CHLOROHEXANE	10	R	U	2.8	10	UG/L	CCVMissi
2,2-DICHLOROPROPANE	70	UJ	U	6.4	70	UG/L	MS%R
2-CHLOROTOLUENE	8	U	U	2	8	UG/L	
4-BROMOFLUOROBENZENE	113			2	2	ERCEN	
4-CHLOROTOLUENE	12	U	U	1.6	12	UG/L	
BENZENE	8	U	U	2	8	UG/L	
BROMOBENZENE	6	U	U	1.8	6	UG/L	
BROMOCHLOROMETHANE	8	U	U	3.6	8	UG/L	
BROMODICHLOROMETHANE	16	UJ	U	2	16	UG/L	MS%R
BROMOFORM	24	U	U	3.6	24	UG/L	
BROMOMETHANE	22	R	U	4	22	UG/L	CCVMissi
CARBON TETRACHLORIDE	42	UJ	U	3.2	42	UG/L	MS%R
CHLOROBENZENE	8	U	U	2.4	8	UG/L	
CHLOROETHANE	20	R	U	6	20	UG/L	CCVMissi
CHLOROFORM	6	U	U	3	6	UG/L	
CHLOROMETHANE	26	R	U	1.8	26	UG/L	CCVMissi
CHLOROMETHANE	26	R	U	1.8	26	UG/L	CV%D
CIS-1,2-DICHLOROETHENE	33	J		1.6	24	UG/L	MS%R
CIS-1,3-DICHLOROPROPENE	20	U	U	2.2	20	UG/L	
DIBROMOCHLOROMETHANE	10	U	U	3.2	10	UG/L	
DIBROMOFLUOROMETHANE	105			2	2	ERCEN	
DIBROMOMETHANE	48	UJ	U	4	48	UG/L	MS%R
DICHLORODIFLUOROMETHANE	20	R	U	7.2	20	UG/L	CV%D
DICHLORODIFLUOROMETHANE	20	R	U	7.2	20	UG/L	CCVMissi
ETHYLBENZENE	12	U	U	2.4	12	UG/L	
HEXAChLOROBUTADIENE	22	U	U	4	22	UG/L	
ISOPROPYLBENZENE	10	U	U	2.6	10	UG/L	
M,P-XYLENE	26	U	U	4.4	26	UG/L	
METHYLENE CHLORIDE	18	R		4.2	6	UG/L	SSCCV%
METHYLENE CHLORIDE	18	R		4.2	6	UG/L	CV%D
METHYLENE CHLORIDE	18	R		4.2	6	UG/L	IC%RSI
N-BUTYLBENZENE	22	U	U	2.2	22	UG/L	
N-PROPYLBENZENE	8	U	U	1.8	8	UG/L	
NAPHTHALENE	8	U	U	2.4	8	UG/L	
O-XYLENE	22	U	U	2.6	22	UG/L	
P-ISOPROPYLtolUENE	24	U	U	1.8	24	UG/L	
SEC-BUTYLBENZENE	26	U	U	2.4	26	UG/L	
STYRENE	8	UJ	U	2.4	8	UG/L	MS%R
TERT-BUTYLBENZENE	28	U	U	2.6	28	UG/L	

6521261

9712227 SW8260A

Page 16 of 19

TETRACHLOROETHENE	28	U	U	3.4	28	UG/L	
TOLUENE	22	U	U	2.8	22	UG/L	
TOLUENE-D8	113			2	2	ERCEN	
TRANS-1,2-DICHLOROETHENE	12	U	U	1.8	12	UG/L	
CIS-1,3-DICHLOROPROPENE	20	UJ	U	3.4	20	UG/L	MS%R
TRICHLOROETHENE	530	J		2	20	UG/L	MS%R
TRICHLOROETHENE	530	J		2	20	UG/L	MSRPC
TRICHLOROFLUOROMETHANE	16	R	U	4.4	16	UG/L	CCVMissi
VINYL CHLORIDE	22	R	U	3.2	22	UG/L	CCVMissi

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA096FD1	1,1,1,2-TETRACHLOROETHANE	10	U	U	2.96	10	UG/L	
	1,1,1-TRICHLOROETHANE	16	U	U	2.6	16	UG/L	
	1,1,2,2-TETRACHLOROETHANE	8	U	U	3.4	8	UG/L	
	1,1,2-TRICHLOROETHANE	20	U	U	3.2	20	UG/L	
	1,1-DICHLOROETHANE	8	UJ	U	2.2	8	UG/L	MS%R
	1,1-DICHLOROETHENE	24	U	U	3	24	UG/L	
	1,1-DICHLOROPROPENE	20	U	U	2.8	20	UG/L	
	1,2,3-TRICHLOROBENZENE	6	U	U	3	6	UG/L	
	1,2,3-TRICHLOROPROPANE	64	U	U	3	64	UG/L	
	1,2,4-TRICHLOROBENZENE	8	U	U	2.6	8	UG/L	
	1,2,4-TRIMETHYLBENZENE	26	U	U	1.8	26	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	52	U	U	5	52	UG/L	
	1,2-DIBROMOETHANE	12	U	U	3.8	12	UG/L	
	1,2-DICHLOROBENZENE	6	U	U	2	6	UG/L	
	1,2-DICHLOROETHANE	12	UJ	U	6.6	12	UG/L	MS%R
	1,2-DICHLOROETHANE	12	UJ	U	6.6	12	UG/L	SD%R
	1,2-DICHLOROPROPANE	8	U	U	1.8	8	UG/L	
	1,3,5-TRIMETHYLBENZENE	10	UJ	U	2	10	UG/L	SD%R
	1,3-DICHLOROBENZENE	24	U	U	1	24	UG/L	
	1,3-DICHLOROPROPANE	8	U	U	3	8	UG/L	
	1,4-DICHLOROBENZENE	6	U	U	2.4	6	UG/L	
	1-CHLOROHEXANE	10	R	U	2.8	10	UG/L	CCVMissi
	2,2-DICHLOROPROPANE	70	UJ	U	6.4	70	UG/L	MS%R
	2-CHLORTOLUENE	8	U	U	2	8	UG/L	
	4-BROMOFLUOROBENZENE	105			2	2	ERCEN	
	4-CHLORTOLUENE	12	U	U	1.6	12	UG/L	
	BENZENE	8	U	U	2	8	UG/L	
	BROMOBENZENE	6	U	U	1.8	6	UG/L	
	BROMOCHLOROMETHANE	8	U	U	3.6	8	UG/L	
	BROMODICHLOROMETHANE	16	UJ	U	2-	16	UG/L	MS%R
	BROMOFORM	24	U	U	3.6	24	UG/L	
	BROMOMETHANE	22	R	U	4	22	UG/L	CCVMissi
	CARBON TETRACHLORIDE	42	UJ	U	3.2	42	UG/L	MS%R
	CHLOROBENZENE	8	U	U	2.4	8	UG/L	
	CHLOROETHANE	20	R	U	6	20	UG/L	CCVMissi
	CHLOROFORM	6	U	U	3	6	UG/L	
	CHLORMETHANE	26	R	U	1.8	26	UG/L	CCVMissi
	CHLORMETHANE	26	R	U	1.8	26	UG/L	CV%D
	CIS-1,2-DICHLOROETHENE	33	J		1.6	24	UG/L	MS%R
	CIS-1,3-DICHLOROPROPENE	20	U	U	2.2	20	UG/L	
	DIBROMOCHLOROMETHANE	10	U	U	3.2	10	UG/L	
	DIBROMOFLUOROMETHANE	108			2	2	ERCEN	
	DIBROMOMETHANE	48	UJ	U	4	48	UG/L	MS%R
	DICHLORODIFLUOROMETHAN	20	R	U	7.2	20	UG/L	CCVMissi

6521265

DICHLORODIFLUOROMETHANE	20	R	U	7.2	20	UG/L	CV%D
ETHYLBENZENE	12	U	U	2.4	12	UG/L	
HEXACHLOROBUTADIENE	22	U	U	4	22	UG/L	
ISOPROPYLBENZENE	10	U	U	2.6	10	UG/L	
M,P-XYLENE	26	U	U	4.4	26	UG/L	
METHYLENE CHLORIDE	19	R		4.2	6	UG/L	CV%D
METHYLENE CHLORIDE	19	R		4.2	6	UG/L	IC%RSE
METHYLENE CHLORIDE	19	R		4.2	6	UG/L	SSCCV%
N-BUTYLBENZENE	22	U	U	2.2	22	UG/L	
N-PROPYLBENZENE	8	U	U	1.8	8	UG/L	
NAPHTHALENE	8	U	U	2.4	8	UG/L	
O-XYLENE	22	U	U	2.6	22	UG/L	
P-ISOPROPYLtolUENE	24	U	U	1.8	24	UG/L	
SEC-BUTYLBENZENE	26	U	U	2.4	26	UG/L	
STYRENE	8	UJ	U	2.4	8	UG/L	MS%R
TERT-BUTYLBENZENE	28	U	U	2.6	28	UG/L	
TETRACHLOROETHENE	28	U	U	3.4	28	UG/L	
TOLUENE	22	U	U	2.8	22	UG/L	
TOLUENE-D8	109			2	2	ERCEN	
TRANS-1,2-DICHLOROETHENE	12	U	U	1.8	12	UG/L	
TRANS-1,3-DICHLOROPROPENE	20	UJ	U	3.4	20	UG/L	MS%R
TRICHLOROETHENE	480	J		2	20	UG/L	MSRPC
TRICHLOROETHENE	480	J		2	20	UG/L	MS%R
TRICHLOROFUOROMETHANE	16	R	U	4.4	16	UG/L	CCVMissi
VINYL CHLORIDE	22	R	U	3.2	22	UG/L	CCVMissi

Validation Flag Abbreviations

Abbreviation	Validation Reason
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

Sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceSRFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

6521268

NAS FW JRB AOC 2

Data Quality Evaluation

CH2MHILL

SDG 9712240

Method SW8260A

Reviewer nh

Date 4/13/98

Matrix water

Senior Review Vito D'Aurora

Field Samples

Due to the concentration of target analytes, samples 4-8 and 11-13 were analyzed at a higher dilution.

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
-----------------	------------------	-----------------	------------------	-----------------	------------------

Water

AHA097TB1	TB	AHA098EB1	EB	AHA099	N
AHA100	N	AHA101	N	AHA102	N
AHA103	N	AHA104	N	AHA105	N
AHA106	-N	AHA107	N	AHA108	N
AHA109FD1	FD	LABQC	BD		

1. Case Narrative Items of Interest

1. Methylene Chloride was detected > the RL in the method blank. This compound was detected < the calculated value in samples 2, 5, 11, 12 and 13, so the data were flagged U (by the lab). The compound was detected > the calculated value in samples 4, 6, 7 and 8; therefore, the samples were not flagged.
2. Dichlorodifluoromethane exceeded criteria in the LCD and Methylene Chloride exceeded the criteria in the LCS/LCD. Dichlorodifluoromethane was not detected in the samples and the recovery for this compound was within the acceptance criteria for the LCS. Data were not affected, so no further action were required.
3. MS/MSD could not be performed because of insufficient sample volume. An LCS/LCD was performed instead.
4. Due to the concentration of target analytes, samples 4-8 and 11-13 were analyzed at a higher dilution.
5. Several compounds from the ICV/CCV order curve were within the acceptance limit but exceeded the 15% RSD criteria. These were quantitated using the average response factor due to software problem.

2. Blank Summary

6521269

9712240 SW8260A

Page 2 of 23

Field Blanks Chloroform was detected above the RL in the Trip blank and Methylene Chloride was detected > the RL in the Equipment blank. The samples were either below the calculated value and marked as a U (by the lab) or detected > the calculated value with no flagging needed.

Method Blanks 1. Methylene Chloride was detected > the RL in the method blank. This compound was detected < the calculated value in samples 2, 5, 11, 12 and 13, so the data were flagged U (by the lab). The compound was detected > the calculated value in samples 4, 6, 7 and 8; therefore, the samples were not validated.

<u>Blank Type</u>	<u>Blank ID</u>	<u>Analyte</u>	<u>Result</u>	<u>ReportLimit</u>	<u>LabFlag</u>	<u>Units</u>
LB	LABQC	METHYLENE CHLORI	0.65	0.21		UG/L
TB	AHA097TB1	CHLOROFORM	0.75	0.15		UG/L

3. Spikes and Duplicates

Field Duplicates Five compounds exceeded the RL; however, the RPDs were not exceeded.

Laboratory Duplicates None

Matrix Spike -MS/MSDs were not performed due to insufficient sample volume.

4. Laboratory Control Sample

Dichlorodifluoromethane exceeded criteria in the LCD and Methylene Chloride exceeded the criteria in the LCS/LCD. Dichlorodifluoromethane was not detected in the samples and therefore was flagged R for the LCL exceedance. Methylene Chloride was flagged both J and R for the LCL exceedance.

<u>Matrix</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>Analyte</u>	<u>Recovery</u>	<u>LowerLimit</u>	<u>UpperLimit</u>
WATER	BS	LABQC	METHYLENE CHLORIDE	70	75	125
WATER	BD	LABQC	DICHLORODIFLUOROMET	69	75	125
WATER	BD	LABQC	METHYLENE CHLORIDE	74	75	125

5. Surrogates

All criteria were met.

6. Tuning and Mass Calibration

All criteria met.

6521270

7. Internal Standard

All internal standard recoveries were within acceptance criteria.

8. Calibration Information

Initial Calibration Methylene Chloride exceeded the % RSD in the ICAL from 12/29/97 and the samples were flagged R.

<u>Field ID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation Reason</u>
AHA099	METHYLENE CHLORIDE	R	IC%RSD
AHA100	METHYLENE CHLORIDE	R	IC%RSD
AHA101	METHYLENE CHLORIDE	R	IC%RSD
AHA102	METHYLENE CHLORIDE	R	IC%RSD
AHA103	METHYLENE CHLORIDE	R	IC%RSD
AHA104	METHYLENE CHLORIDE	R	IC%RSD
AHA105	METHYLENE CHLORIDE	R	IC%RSD
AHA106	METHYLENE CHLORIDE	R	IC%RSD
AHA107	METHYLENE CHLORIDE	R	IC%RSD
AHA108	METHYLENE CHLORIDE	R	IC%RSD
AHA109FD1	METHYLENE CHLORIDE	R	IC%RSD

Continuing Calibration 1. Dichlorodifluoromethane and Methylene Chloride exceeded the 25% criteria in the CCV from 01/02/98. The samples were flagged R.
2. Seven compounds were missing from the second source CCV from 12/26/97. Methylene Chloride exceeded 25% of the expected value. The samples were validated with an R flag.

<u>Field ID</u>	<u>LabsampleID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation</u>
AHA099	9712240-3	1-CHLOROHEXANE	R	CCVMiss
AHA099	9712240-3	BROMOMETHANE	R	CCVMiss
AHA099	9712240-3	CHLOROETHANE	R	CCVMiss
AHA099	9712240-3	CHLOROMETHANE	R	CCVMiss
AHA099	9712240-3	DICHLORODIFLUOROMETHANE	R	CV%D
AHA099	9712240-3	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA099	9712240-3	METHYLENE CHLORIDE	R	CV%D
AHA099	9712240-3	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA099	9712240-3	VINYL CHLORIDE	R	CCVMiss
AHA100	9712240-4	1-CHLOROHEXANE	R	CCVMiss
AHA100	9712240-4	BROMOMETHANE	R	CCVMiss
AHA100	9712240-4	CHLOROETHANE	R	CCVMiss
AHA100	9712240-4	CHLOROMETHANE	R	CCVMiss
AHA100	9712240-4	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA100	9712240-4	DICHLORODIFLUOROMETHANE	R	CV%D
AHA100	9712240-4	METHYLENE CHLORIDE	R	CV%D
AHA100	9712240-4	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA100	9712240-4	VINYL CHLORIDE	R	CCVMiss

6521271

9712240 SW8260A

Page 4 of 23

AHA101	9712240-5	1-CHLOROHEXANE	R	CCVMiss
AHA101	9712240-5	BROMOMETHANE	R	CCVMiss
AHA101	9712240-5	CHLOROETHANE	R	CCVMiss
AHA101	9712240-5	CHLOROMETHANE	R	CCVMiss
AHA101	9712240-5	DICHLORODIFLUOROMETHANE	R	CV%D
AHA101	9712240-5	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA101	9712240-5	METHYLENE CHLORIDE	R	CV%D
AHA101	9712240-5	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA101	9712240-5	VINYL CHLORIDE	R	CCVMiss
AHA102	9712240-6	1-CHLOROHEXANE	R	CCVMiss
AHA102	9712240-6	BROMOMETHANE	R	CCVMiss
AHA102	9712240-6	CHLOROETHANE	R	CCVMiss
AHA102	9712240-6	CHLOROMETHANE	R	CCVMiss
AHA102	9712240-6	DICHLORODIFLUOROMETHANE	R	CV%D
AHA102	9712240-6	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA102	9712240-6	METHYLENE CHLORIDE	R	CV%D
AHA102	9712240-6	TRICHLOROFLUOROMETHANE	R	CCVMiss
— AHA102	9712240-6	VINYL CHLORIDE	R	CCVMiss
AHA103	9712240-7	1-CHLOROHEXANE	R	CCVMiss
AHA103	9712240-7	BROMOMETHANE	R	CCVMiss
AHA103	9712240-7	CHLOROETHANE	R	CCVMiss
AHA103	9712240-7	CHLOROMETHANE	R	CCVMiss
AHA103	9712240-7	DICHLORODIFLUOROMETHANE	R	CV%D
AHA103	9712240-7	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA103	9712240-7	METHYLENE CHLORIDE	R	CV%D
AHA103	9712240-7	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA103	9712240-7	VINYL CHLORIDE	R	CCVMiss
AHA104	9712240-8	1-CHLOROHEXANE	R	CCVMiss
AHA104	9712240-8	BROMOMETHANE	R	CCVMiss
AHA104	9712240-8	CHLOROETHANE	R	CCVMiss
AHA104	9712240-8	CHLOROMETHANE	R	CCVMiss
AHA104	9712240-8	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA104	9712240-8	DICHLORODIFLUOROMETHANE	R	CV%D
AHA104	9712240-8	METHYLENE CHLORIDE	R	CV%D
AHA104	9712240-8	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA104	9712240-8	VINYL CHLORIDE	R	CCVMiss
AHA105	9712240-9	1-CHLOROHEXANE	R	CCVMiss
AHA105	9712240-9	BROMOMETHANE	R	CCVMiss
AHA105	9712240-9	CHLOROETHANE	R	CCVMiss
AHA105	9712240-9	CHLOROMETHANE	R	CCVMiss
AHA105	9712240-9	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA105	9712240-9	DICHLORODIFLUOROMETHANE	R	CV%D
AHA105	9712240-9	METHYLENE CHLORIDE	R	CV%D
AHA105	9712240-9	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA105	9712240-9	VINYL CHLORIDE	R	CCVMiss

S-1583

6521272

AHA106	9712240-10	1-CHLOROHEXANE	R	CCVMiss
AHA106	9712240-10	BROMOMETHANE	R	CCVMiss
AHA106	9712240-10	CHLOROETHANE	R	CCVMiss
AHA106	9712240-10	CHLOROMETHANE	R	CCVMiss
AHA106	9712240-10	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA106	9712240-10	DICHLORODIFLUOROMETHANE	R	CV%D
AHA106	9712240-10	METHYLENE CHLORIDE	R	CV%D
AHA106	9712240-10	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA106	9712240-10	VINYL CHLORIDE	R	CCVMiss
AHA107	9712240-11	1-CHLOROHEXANE	R	CCVMiss
AHA107	9712240-11	BROMOMETHANE	R	CCVMiss
AHA107	9712240-11	CHLOROETHANE	R	CCVMiss
AHA107	9712240-11	CHLOROMETHANE	R	CCVMiss
AHA107	9712240-11	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA107	9712240-11	DICHLORODIFLUOROMETHANE	R	CV%D
AHA107	9712240-11	METHYLENE CHLORIDE	R	CV%D
AHA107	9712240-11	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA107	9712240-11	VINYL CHLORIDE	R	CCVMiss
AHA108	9712240-12	1-CHLOROHEXANE	R	CCVMiss
AHA108	9712240-12	BROMOMETHANE	R	CCVMiss
AHA108	9712240-12	CHLOROETHANE	R	CCVMiss
AHA108	9712240-12	CHLOROMETHANE	R	CCVMiss
AHA108	9712240-12	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA108	9712240-12	DICHLORODIFLUOROMETHANE	R	CV%D
AHA108	9712240-12	METHYLENE CHLORIDE	R	CV%D
AHA108	9712240-12	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA108	9712240-12	VINYL CHLORIDE	R	CCVMiss
AHA109FD1	9712240-13	1-CHLOROHEXANE	R	CCVMiss
AHA109FD1	9712240-13	BROMOMETHANE	R	CCVMiss
AHA109FD1	9712240-13	CHLOROETHANE	R	CCVMiss
AHA109FD1	9712240-13	CHLOROMETHANE	R	CCVMiss
AHA109FD1	9712240-13	DICHLORODIFLUOROMETHANE	R	CV%D
AHA109FD1	9712240-13	DICHLORODIFLUOROMETHANE	R	CCVMiss
AHA109FD1	9712240-13	METHYLENE CHLORIDE	R	CV%D
AHA109FD1	9712240-13	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA109FD1	9712240-13	VINYL CHLORIDE	R	CCVMiss

9. Holding Time

Holding times were met.

10. Summary

General Comments 1. Dichlorodifluoromethane exceeded criteria in the LCD and Methylene Chloride exceeded the criteria in the LCS/LCD. Dichlorodifluoromethane was not detected in the samples and therefore was flagged R for the LCL exceedance. Methylene Chloride

6521273

9712240 SW8260A

Page 6 of 23

- was flagged both J and R for the LCL exceedance.
2. Methylene Chloride exceeded the % RSD in the ICAL from 12/29/97 and the samples were flagged R.
 3. Dichlorodifluoromethane and Methylene Chloride exceeded the 25% criteria in the CCV from 01/02/98. The samples were flagged R.
 4. Seven compounds were missing from the second source CCV from 12/26/97. Methylene Chloride exceeded 25% of the expected value. The samples were validated with an R flag.

Data Package Completeness Complete.

Forms Review/ Items of Interest Due to the concentration of target analytes, samples 4-8 and 11-13 were analyzed at a higher dilution.

COC Review Complete

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA099	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.148	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	U	U	0.16	1	UG/L	
	1,1-DICHLOROETHANE	0.4	U	U	0.11	0.4	UG/L	
	1,1-DICHLOROETHENE	1.2	U	U	0.15	1.2	UG/L	
	1,1-DICHLOROPROPENE	1	U	U	0.14	1	UG/L	
	1,2,3-TRICHLOROBENZENE	0.3	U	U	0.15	0.3	UG/L	
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	U	U	0.13	0.4	UG/L	
	1,2,4-TRIMETHYLBENZENE	1.3	U	U	0.09	1.3	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	2.6	U	U	0.25	2.6	UG/L	
	1,2-DIBROMOETHANE	0.6	U	U	0.19	0.6	UG/L	
	1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
	1,2-DICHLOROETHANE	0.6	U	U	0.33	0.6	UG/L	
	1,2-DICHLOROPROPANE	0.4	U	U	0.09	0.4	UG/L	
	1,3,5-TRIMETHYLBENZENE	0.5	U	U	0.1	0.5	UG/L	
	1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
	1,3-DICHLOROPROPANE	0.4	U	U	0.15	0.4	UG/L	
	1,4-DICHLOROBENZENE	0.3	U	U	0.12	0.3	UG/L	
	1-CHLOROHEXANE	0.5	R	U	0.14	0.5	UG/L	CCVMISS
	2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L	
	2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	
	4-BROMOFLUOROBENZENE	118			0.1	0.1	ERCEN	
	4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L	
	BENZENE	0.4	U	U	0.1	0.4	UG/L	
	BROMOBENZENE	0.3	U	U	0.09	0.3	UG/L	
	BROMOCHLOROMETHANE	0.4	U	U	0.18	0.4	UG/L	
	BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L	
	BROMOFORM	1.2	U	U	0.18	1.2	UG/L	
	BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	CCVMISS
	CARBON TETRACHLORIDE	2.1	U	U	0.16	2.1	UG/L	
	CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	
	CHLOROETHANE	1	R	U	0.3	1	UG/L	CCVMISS
	CHLOROFORM	0.3	U	U	0.15	0.3	UG/L	
	CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	CCVMISS
	CIS-1,2-DICHLOROETHENE	0.48	F	F	0.08	1.2	UG/L	
	CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L	
	DIBROMOCHLOROMETHANE	0.5	U	U	0.16	0.5	UG/L	
	DIBROMOFLUOROMETHANE	107			0.1	0.1	ERCEN	
	DIBROMOMETHANE	2.4	U	U	0.2	2.4	UG/L	
	DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L	CCVMISS
	DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L	CV%D
	DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L	BD%R
	ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L	
	HEXAChLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L	
	ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L	

6521275

9712240 SW8260A

Page 8 of 23

M,P-XYLENE	1.3	U	U	0.22	1.3	UG/L	
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BS%R
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	SSCCV%
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BD%R
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	CV%D
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	IC%RSI
N-BUTYLBENZENE	1.1	U	U	0.11	1.1	UG/L	
N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L	
NAPHTHALENE	0.4	U	U	0.12	0.4	UG/L	
O-XYLENE	1.1	U	U	0.13	1.1	UG/L	
P-ISOPROPYLtolUENE	1.2	U	U	0.09	1.2	UG/L	
SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L	
STYRENE	0.4	U	U	0.12	0.4	UG/L	
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L	
TETRACHLOROETHENE	0.36	F	F	0.17	1.4	UG/L	
TOLUENE	1.1	U	U	0.14	1.1	UG/L	
TOLUENE-D8	110			0.1	0.1	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.6	U	U	0.09	0.6	UG/L	
TRANS-1,3-DICHLOROPROPENE	1	U	U	0.17	1	UG/L	
TRICHLOROETHENE	23			0.1	1	UG/L	
TRICHLOROFUOROMETHANE	0.8	R	U	0.22	0.8	UG/L	CCVMissi
VINYL CHLORIDE	1.1	R	U	0.16	1.1	UG/L	CCVMissi

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA100	1,1,1,2-TETRACHLOROETHANE	5	U	U	1.48	5	UG/L	
	1,1,1-TRICHLOROETHANE	8	U	U	1.3	8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	4	U	U	1.7	4	UG/L	
	1,1,2-TRICHLOROETHANE	10	U	U	1.6	10	UG/L	
	1,1-DICHLOROETHANE	4	U	U	1.1	4	UG/L	
	1,1-DICHLOROETHENE	12	U	U	1.5	12	UG/L	
	1,1-DICHLOROPROPENE	10	U	U	1.4	10	UG/L	
	1,2,3-TRICHLOROBENZENE	3	U	U	1.5	3	UG/L	
	1,2,3-TRICHLOROPROPANE	32	U	U	1.5	32	UG/L	
	1,2,4-TRICHLOROBENZENE	4	U	U	1.3	4	UG/L	
	1,2,4-TRIMETHYLBENZENE	13	U	U	0.9	13	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	26	U	U	2.5	26	UG/L	
	1,2-DIBROMOETHANE	6	U	U	1.9	6	UG/L	
	1,2-DICHLOROBENZENE	3	U	U	1	3	UG/L	
	1,2-DICHLOROETHANE	6	U	U	3.3	6	UG/L	
	1,2-DICHLOROPROPANE	4	U	U	0.9	4	UG/L	
	1,3,5-TRIMETHYLBENZENE	5	U	U	1	5	UG/L	
	1,3-DICHLOROBENZENE	12	U	U	0.5	12	UG/L	
	1,3-DICHLOROPROPANE	4	U	U	1.5	4	UG/L	
	1,4-DICHLOROBENZENE	3	U	U	1.2	3	UG/L	
	1-CHLOROHEXANE	5	R	U	1.4	5	UG/L	CCVMissi
	2,2-DICHLOROPROPANE	35	U	U	3.2	35	UG/L	
	2-CHLOROTOLUENE	4	U	U	1	4	UG/L	
	4-BROMOFLUOROBENZENE	110			1	1	ERCEN	
	4-CHLOROTOLUENE	6	U	U	0.8	6	UG/L	
	BENZENE	4	U	U	1	4	UG/L	
	BROMOBENZENE	3	U	U	0.9	3	UG/L	
	BROMOCHLOROMETHANE	4	U	U	1.8	4	UG/L	
	BROMODICHLOROMETHANE	8	U	U	1	8	UG/L	
	BROMOFORM	12	U	U	1.8	12	UG/L	
	BROMOMETHANE	11	R	U	2	11	UG/L	CCVMissi

CARBON TETRACHLORIDE	21	U	U	1.6	21	UG/L	
CHLOROBENZENE	4	U	U	1.2	4	UG/L	
CHLOROETHANE	10	R	U	3	10	UG/L	CCVMiss
CHLOROPFORM	3	U	U	1.5	3	UG/L	
CHLOROMETHANE	13	R	U	0.9	13	UG/L	CCVMiss
CIS-1,2-DICHLOROETHENE	8.9	F	F	0.8	12	UG/L	
CIS-1,3-DICHLOROPROPENE	10	U	U	1.1	10	UG/L	
DIBROMOCHLOROMETHANE	5	U	U	1.6	5	UG/L	
DIBROMOFLUOROMETHANE	106			1	1	ERCEN	
DIBROMOMETHANE	24	U	U	2	24	UG/L	
DICHLORODIFLUOROMETHANE	10	R	U	3.6	10	UG/L	CV%D
DICHLORODIFLUOROMETHANE	10	R	U	3.6	10	UG/L	BD%R
DICHLORODIFLUOROMETHANE	10	R	U	3.6	10	UG/L	CCVMiss
ETHYLBENZENE	6	U	U	1.2	6	UG/L	
HEXACHLOROBUTADIENE	11	U	U	2	11	UG/L	
ISOPROPYLBENZENE	5	U	U	1.3	5	UG/L	
M,P-XYLENE	13	U	U	2.2	13	UG/L	
METHYLENE CHLORIDE	8.7	R		2.1	3	UG/L	CV%D
METHYLENE CHLORIDE	8.7	R		2.1	3	UG/L	IC%RSI
METHYLENE CHLORIDE	8.7	R		2.1	3	UG/L	SSCCV%
N-BUTYLBENZENE	11	U	U	1.1	11	UG/L	
N-PROPYLBENZENE	4	U	U	0.9	4	UG/L	
NAPHTHALENE	4	-U	U	1.2	4	UG/L	
O-XYLENE	11	U	U	1.3	11	UG/L	
P-ISOPROPYLtolUENE	12	U	U	0.9	12	UG/L	
SEC-BUTYLBENZENE	13	U	U	1.2	13	UG/L	
- STYRENE	4	U	U	1.2	4	UG/L	
TERT-BUTYLBENZENE	14	U	U	1.3	14	UG/L	
TETRACHLOROETHENE	8.2	F	F	1.7	14	UG/L	
TOLUENE	11	U	U	1.4	11	UG/L	
TOLUENE-D8	114			1	1	ERCEN	
TRANS-1,2-DICHLOROETHENE	6	U	U	0.9	6	UG/L	
TRANS-1,3-DICHLOROPROPENE	10	U	U	1.7	10	UG/L	
TRICHLOROETHENE	380			1	10	UG/L	CCVMiss
TRICHLOROFLUOROMETHANE	8	R	U	2.2	8	UG/L	CCVMiss
VINYL CHLORIDE	11	R	U	1.6	11	UG/L	

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA101	1,1,1,2-TETRACHLOROETHANE	1	U	U	0.296	1	UG/L	
	1,1,1-TRICHLOROETHANE	1.6	U	U	0.26	1.6	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.8	U	U	0.34	0.8	UG/L	
	1,1,2-TRICHLOROETHANE	2	U	U	0.32	2	UG/L	
	1,1-DICHLOROETHANE	0.8	U	U	0.22	0.8	UG/L	
	1,1-DICHLOROETHENE	2.4	U	U	0.3	2.4	UG/L	
	1,1-DICHLOROPROPENE	2	U	U	0.28	2	UG/L	
	1,2,3-TRICHLOROBENZENE	0.6	U	U	0.3	0.6	UG/L	
	1,2,3-TRICHLOROPROPANE	6.4	U	U	0.3	6.4	UG/L	
	1,2,4-TRICHLOROBENZENE	0.8	U	U	0.26	0.8	UG/L	
	1,2,4-TRIMETHYLBENZENE	2.6	U	U	0.18	2.6	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	5.2	U	U	0.5	5.2	UG/L	
	1,2-DIBROMOETHANE	1.2	U	U	0.38	1.2	UG/L	
	1,2-DICHLOROBENZENE	0.6	U	U	0.2	0.6	UG/L	
	1,2-DICHLOROETHANE	1.2	U	U	0.66	1.2	UG/L	
	1,2-DICHLOROPROPANE	0.8	U	U	0.18	0.8	UG/L	
	1,3,5-TRIMETHYLBENZENE	1	U	U	0.2	1	UG/L	

6521277

9712240 SW8260A

Page 10 of 23

	1,3-DICHLOROBENZENE	2.4	U	U	0.1	2.4	UG/L	
	1,3-DICHLOROPROPANE	0.8	U	U	0.3	0.8	UG/L	
	1,4-DICHLOROBENZENE	0.6	U	U	0.24	0.6	UG/L	
	1-CHLOROHEXANE	1	R	U	0.28	1	UG/L	CCVMissi
	2,2-DICHLOROPROPANE	7	U	U	0.64	7	UG/L	
	2-CHLOROTOLUENE	0.8	U	U	0.2	0.8	UG/L	
	4-BROMOFLUOROBENZENE	114			0.2	0.2	ERCEN	
	4-CHLOROTOLUENE	1.2	U	U	0.16	1.2	UG/L	
	BENZENE	0.8	U	U	0.2	0.8	UG/L	
	BROMOBENZENE	0.6	U	U	0.18	0.6	UG/L	
	BROMOCHLOROMETHANE	0.8	U	U	0.36	0.8	UG/L	
	BROMODICHLOROMETHANE	1.6	U	U	0.2	1.6	UG/L	
	BROMOFORM	2.4	U	U	0.36	2.4	UG/L	
	BROMOMETHANE	2.2	R	U	0.4	2.2	UG/L	CCVMissi
	CARBON TETRACHLORIDE	4.2	U	U	0.32	4.2	UG/L	
	CHLOROBENZENE	0.8	U	U	0.24	0.8	UG/L	
	CHLOROETHANE	2	R	U	0.6	2	UG/L	CCVMissi
	CHLOROFORM	0.6	U	U	0.3	0.6	UG/L	
	CHLOROMETHANE	2.6	R	U	0.18	2.6	UG/L	CCVMissi
	CIS-1,2-DICHLOROETHENE	1.2	F	F	0.16	2.4	UG/L	
	CIS-1,3-DICHLOROPROPENE	2	U	U	0.22	2	UG/L	
	DIBROMOCHLOROMETHANE	1	U	U	0.32	1	UG/L	
	DIBROMOFLUOROMETHANE	103			0.2	0.2	ERCEN	
	DIBROMOMETHANE	4.8	U	U	0.4	4.8	UG/L	
	DICHLORODIFLUOROMETHANI	2	R	U	0.72	2	UG/L	CV%D
	DICHLORODIFLUOROMETHANI	2	R	U	0.72	2	UG/L	BD%R
	DICHLORODIFLUOROMETHANI	2	R	U	0.72	2	UG/L	CCVMissi
	ETHYLBENZENE	1.2	U	U	0.24	1.2	UG/L	
	HEXAChLOROBUTADIENE	2.2	U	U	0.4	2.2	UG/L	
	ISOPROPYLBENZENE	1	U	U	0.26	1	UG/L	
	M,P-XYLENE	2.6	U	U	—	0.44	2.6	UG/L
	METHYLENE CHLORIDE	1.1	R	U	0.42	0.6	UG/L	BD%R
	METHYLENE CHLORIDE	1.1	R	U	0.42	0.6	UG/L	BS%R
	METHYLENE CHLORIDE	1.1	R	U	—	0.42	0.6	UG/L
	METHYLENE CHLORIDE	1.1	R	U	0.42	0.6	UG/L	CV%D
	METHYLENE CHLORIDE	1.1	R	U	0.42	0.6	UG/L	IC%RSI
	N-BUTYLBENZENE	2.2	U	U	0.22	2.2	UG/L	SSCCV%
	N-PROPYLBENZENE	0.8	U	U	0.18	0.8	UG/L	
	NAPHTHALENE	0.8	U	U	0.24	0.8	UG/L	
	O-XYLENE	2.2	U	U	0.26	2.2	UG/L	
	P-ISOPROPYLtolUENE	2.4	U	U	0.18	2.4	UG/L	
	SEC-BUTYLBENZENE	2.6	U	U	0.24	2.6	UG/L	
	STYRENE	0.8	U	U	0.24	0.8	UG/L	
	TERT-BUTYLBENZENE	2.8	U	U	0.26	2.8	UG/L	
	TETRACHLOROETHENE	2.8	U	U	0.34	2.8	UG/L	
	TOLUENE	2.2	U	U	0.28	2.2	UG/L	
	TOLUENE-D8	113			0.2	0.2	ERCEN	
	TRANS-1,2-DICHLOROETHENE	1.2	U	U	0.18	1.2	UG/L	
	TRANS-1,3-DICHLOROPROPENE	2	U	U	0.34	2	UG/L	
	TRICHLOROETHENE	59			0.2	2	UG/L	
	TRICHLOROFLUOROMETHANE	1.6	R	U	0.44	1.6	UG/L	CCVMissi
	VINYL CHLORIDE	2.2	R	U	0.32	2.2	UG/L	CCVMissi

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA102	1,1,1,2-TETRACHLOROETHANE	10	U	U	2.96	10	UG/L	

6521278

1,1,1-TRICHLOROETHANE	16	U	U	2.6	16	UG/L
1,1,2,2-TETRACHLOROETHANE	8	U	U	3.4	8	UG/L
1,1,2-TRICHLOROETHANE	20	U	U	3.2	20	UG/L
1,1-DICHLOROETHANE	8	U	U	2.2	8	UG/L
1,1-DICHLOROETHENE	24	U	U	3	24	UG/L
1,1-DICHLOROPROPENE	20	U	U	2.8	20	UG/L
1,2,3-TRICHLOROBENZENE	6	U	U	3	6	UG/L
1,2,3-TRICHLOROPROPANE	64	U	U	3	64	UG/L
1,2,4-TRICHLOROBENZENE	8	U	U	2.6	8	UG/L
1,2,4-TRIMETHYLBENZENE	26	U	U	1.8	26	UG/L
2-DIBROMO-3-CHLOROPROPANE	52	U	U	5	52	UG/L
1,2-DIBROMOETHANE	12	U	U	3.8	12	UG/L
1,2-DICHLOROBENZENE	6	U	U	2	6	UG/L
1,2-DICHLOROETHANE	12	U	U	6.6	12	UG/L
1,2-DICHLOROPROPANE	8	U	U	1.8	8	UG/L
1,3,5-TRIMETHYLBENZENE	10	U	U	2	10	UG/L
1,3-DICHLOROBENZENE	24	U	U	1	24	UG/L
1,3-DICHLOROPROPANE	8	U	U	3	8	UG/L
1,4-DICHLOROBENZENE	6	U	U	2.4	6	UG/L
1-CHLOROHEXANE	10	R	U	2.8	10	UG/L
2,2-DICHLOROPROPANE	70	U	U	6.4	70	UG/L
2-CHLOROTOLUENE	8	U	U	2	8	UG/L
4-BROMOFLUOROBENZENE	112			2	2	ERCEN
4-CHLOROTOLUENE	12	U	-U	1.6	12	UG/L
BENZENE	8	U	U	2	8	UG/L
BROMOBENZENE	6	U	U	1.8	6	UG/L
BROMOCHLOROMETHANE	8	U	U	3.6	8	UG/L
BROMODICHLOROMETHANE	16	U	U	2	16	UG/L
BROMOFORM	24	U	U	3.6	24	UG/L
BROMOMETHANE	22	R	U	4	22	UG/L
CARBON TETRACHLORIDE	42	U	U	3.2	42	UG/L
CHLOROBENZENE	8	U	U	2.4	8	UG/L
CHLOROETHANE	20	R	U	6	20	UG/L
CHLOROFORM	6	U	U	3	6	UG/L
CHLOROMETHANE	26	R	U	1.8	26	UG/L
CIS-1,2-DICHLOROETHENE	100			1.6	24	UG/L
CIS-1,3-DICHLOROPROPENE	20	U	U	2.2	20	UG/L
DIBROMOCHLOROMETHANE	10	U	U	3.2	10	UG/L
DIBROMOFLUOROMETHANE	108			2	2	ERCEN
DIBROMOMETHANE	48	U	U	4	48	UG/L
DICHLORODIFLUOROMETHANI	20	R	U	7.2	20	UG/L
DICHLORODIFLUOROMETHANI	20	R	U	7.2	20	UG/L
DICHLORODIFLUOROMETHANI	20	R	U	7.2	20	UG/L
ETHYLBENZENE	12	U	U	2.4	12	UG/L
HEXACHLOROBUTADIENE	22	U	U	4	22	UG/L
ISOPROPYLBENZENE	10	U	U	2.6	10	UG/L
M,P-XYLENE	26	U	U	4.4	26	UG/L
METHYLENE CHLORIDE	17	R		4.2	6	UG/L
METHYLENE CHLORIDE	17	R		4.2	6	UG/L
METHYLENE CHLORIDE	17	R		4.2	6	UG/L
N-BUTYLBENZENE	22	U	U	2.2	22	UG/L
N-PROPYLBENZENE	8	U	U	1.8	8	UG/L
NAPHTHALENE	8	U	U	2.4	8	UG/L
O-XYLENE	22	U	U	2.6	22	UG/L
P-ISOPROPYLtolUENE	24	U	U	1.8	24	UG/L
SEC-BUTYLBENZENE	26	U	U	2.4	26	UG/L

CCVMissi

CCVMissi

CCVMissi

BD%R

CCVMissi

CV%D

CV%D

IC%RSI

SSCCV%

6521279

9712240 SW8260A

Page 12 of 23

STYRENE	8	U	U	2.4	8	UG/L
TERT-BUTYLBENZENE	28	U	U	2.6	28	UG/L
TETRACHLOROETHENE	28	U	U	3.4	28	UG/L
TOLUENE	22	U	U	2.8	22	UG/L
TOLUENE-D8	106			2	2	ERCEN
TRANS-1,2-DICHLOROETHENE	12	U	U	1.8	12	UG/L
TRANS-1,3-DICHLOROPROPENE	20	U	U	3.4	20	UG/L
TRICHLOROETHENE	500			2	20	UG/L
TRICHLOROFLUOROMETHANE	16	R	U	4.4	16	UG/L
VINYL CHLORIDE	22	R	U	3.2	22	UG/L
						CCVMissi
						CCVMissi

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA103	1,1,1,2-TETRACHLOROETHANE	10	U	U	2.96	10	UG/L	
	1,1,1-TRICHLOROETHANE	16	U	U	2.6	16	UG/L	
	1,1,2,2-TETRACHLOROETHANE	8	U	U	3.4	8	UG/L	
	1,1,2-TRICHLOROETHANE	-20	U	U	3.2	20	UG/L	
	1,1-DICHLOROETHANE	8	U	U	2.2	8	UG/L	
	1,1-DICHLOROETHENE	24	U	U	3	24	UG/L	
	1,1-DICHLOROPROPENE	20	U	U	2.8	20	UG/L	
	1,2,3-TRICHLOROBENZENE	6	U	U	3	6	UG/L	
	1,2,3-TRICHLOROPROPANE	64	U	U	3	64	UG/L	
	1,2,4-TRICHLOROBENZENE	8	U	U	2.6	8	UG/L	
	1,2,4-TRIMETHYLBENZENE	26	U	U	1.8	26	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	52	U	U	5	52	UG/L	
	1,2-DIBROMOETHANE	12	U	U	3.8	12	UG/L	
	1,2-DICHLOROBENZENE	6	U	U	2	6	UG/L	
	1,2-DICHLOROETHANE	12	U	U	6.6	12	UG/L	
	1,2-DICHLOROPROPANE	8	U	U	1.8	8	UG/L	
	1,3,5-TRIMETHYLBENZENE	10	U	U	2	10	UG/L	
	1,3-DICHLOROBENZENE	24	U	U	1	24	UG/L	
	1,3-DICHLOROPROPANE	8	U	U	3	8	UG/L	
	1,4-DICHLOROBENZENE	6	U	U	2.4	6	UG/L	
	1-CHLOROHEXANE	10	R	U	2.8	10	UG/L	CCVMissi
	2,2-DICHLOROPROPANE	70	U	U	6.4	70	UG/L	
	2-CHLOROTOLUENE	8	U	U	2	8	UG/L	
	4-BROMOFLUOROBENZENE	110			2	2	ERCEN	
	4-CHLOROTOLUENE	12	U	U	1.6	12	UG/L	
	BENZENE	8	U	U	2	8	UG/L	
	BROMOBENZENE	6	U	U	1.8	6	UG/L	
	BROMOCHLOROMETHANE	8	U	U	3.6	8	UG/L	
	BROMODICHLOROMETHANE	16	U	U	2	16	UG/L	
	BROMOFORM	24	U	U	3.6	24	UG/L	
	BROMOMETHANE	22	R	U	4	22	UG/L	CCVMissi
	CARBON TETRACHLORIDE	42	U	U	3.2	42	UG/L	
	CHLOROBENZENE	8	U	U	2.4	8	UG/L	
	CHLOROETHANE	20	R	U	6	20	UG/L	CCVMissi
	CHLOROFORM	6	U	U	3	6	UG/L	
	CHLOROMETHANE	26	R	U	1.8	26	UG/L	CCVMissi
	CIS-1,2-DICHLOROETHENE	7.4	F	F	1.6	24	UG/L	
	CIS-1,3-DICHLOROPROPENE	20	U	U	2.2	20	UG/L	
	DIBROMOCHLOROMETHANE	10	U	U	3.2	10	UG/L	
	DIBROMOFLUOROMETHANE	106			2	2	ERCEN	
	DIBROMOMETHANE	48	U	U	4	48	UG/L	
	DICHLORODIFLUOROMETHANE	20	R	U	7.2	20	UG/L	BD%R
	DICHLORODIFLUOROMETHANE	20	R	U	7.2	20	UG/L	CCVMissi

DICHLORODIFLUOROMETHANE	20	R	U	7.2	20	UG/L	CV%D
ETHYLBENZENE	12	U	U	2.4	12	UG/L	
HEXACHLOROBUTADIENE	22	U	U	4	22	UG/L	
ISOPROPYLBENZENE	10	U	U	2.6	10	UG/L	
M,P-XYLENE	26	U	U	4.4	26	UG/L	
METHYLENE CHLORIDE	18	R		4.2	6	UG/L	CV%D
METHYLENE CHLORIDE	18	R		4.2	6	UG/L	IC%RSI
METHYLENE CHLORIDE	18	R		4.2	6	UG/L	SSCCV%
N-BUTYLBENZENE	22	U	U	2.2	22	UG/L	
N-PROPYLBENZENE	8	U	U	1.8	8	UG/L	
NAPHTHALENE	8	U	U	2.4	8	UG/L	
O-XYLENE	22	U	U	2.6	22	UG/L	
P-ISOPROPYLtolUENE	24	U	U	1.8	24	UG/L	
SEC-BUTYLBENZENE	26	U	U	2.4	26	UG/L	
STYRENE	8	U	U	2.4	8	UG/L	
TERT-BUTYLBENZENE	28	U	U	2.6	28	UG/L	
TETRACHLOROETHENE	28	U	U	3.4	28	UG/L	
TOLUENE	22	U	U	2.8	22	UG/L	
TOLUENE-D8	112			2	2	ERCEN	
TRANS-1,2-DICHLOROETHENE	12	U	U	1.8	12	UG/L	
TRANS-1,3-DICHLOROPROPENE	20	U	U	3.4	20	UG/L	
TRICHLOROETHENE	480			2	20	UG/L	
TRICHLOROFUOROMETHANE	16	R	U	4.4	16	UG/L	CCVMissi
VINYL CHLORIDE	22	R	U	3.2	22	UG/L	CCVMissi

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA104	1,1,1,2-TETRACHLOROETHANE	10	U	U	2.96	10	UG/L	
	1,1,1-TRICHLOROETHANE	16	U	U	2.6	16	UG/L	
	1,1,2,2-TETRACHLOROETHANE	8	U	U	3.4	8	UG/L	
	1,1,2-TRICHLOROETHANE	20	U	U	3.2	20	UG/L	
	1,1-DICHLOROETHANE	8	U	U	2.2	8	UG/L	
	1,1-DICHLOROETHENE	24	U	U	3	24	UG/L	
	1,1-DICHLOROPROPENE	20	U	U	2.8	20	UG/L	
	1,2,3-TRICHLOROBENZENE	6	U	U	3	6	UG/L	
	1,2,3-TRICHLOROPROPANE	64	U	U	3	64	UG/L	
	1,2,4-TRICHLOROBENZENE	8	U	U	2.6	8	UG/L	
	1,2,4-TRIMETHYLBENZENE	26	U	U	1.8	26	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	52	U	U	5	52	UG/L	
	1,2-DIBROMOETHANE	12	U	U	3.8	12	UG/L	
	1,2-DICHLOROBENZENE	6	U	U	2	6	UG/L	
	1,2-DICHLOROETHANE	12	U	U	6.6	12	UG/L	
	1,2-DICHLOROPROPANE	8	U	U	1.8	8	UG/L	
	1,3,5-TRIMETHYLBENZENE	10	U	U	2	10	UG/L	
	1,3-DICHLOROBENZENE	24	U	U	1	24	UG/L	
	1,3-DICHLOROPROPANE	8	U	U	3	8	UG/L	
	1,4-DICHLOROBENZENE	6	U	U	2.4	6	UG/L	
	1-CHLOROHEXANE	10	R	U	2.8	10	UG/L	CCVMissi
	2,2-DICHLOROPROPANE	70	U	U	6.4	70	UG/L	
	2-CHLOROTOLUENE	8	U	U	2	8	UG/L	
	4-BROMOFUOROBENZENE	108			2	2	ERCEN	
	4-CHLOROTOLUENE	12	U	U	1.6	12	UG/L	
	BENZENE	8	U	U	2	8	UG/L	
	BROMOBENZENE	6	U	U	1.8	6	UG/L	
	BROMOCHLOROMETHANE	8	U	U	3.6	8	UG/L	
	BROMODICHLOROMETHANE	16	U	U	2	16	UG/L	

6521281

9712240 SW8260A

Page 14 of 23

BROMOFORM	24	U	U	3.6	24	UG/L	
BROMOMETHANE	22	R	U	4	22	UG/L	CCVMissi
CARBON TETRACHLORIDE	42	U	U	3.2	42	UG/L	
CHLOROBENZENE	8	U	U	2.4	8	UG/L	
CHLOROETHANE	20	R	U	6	20	UG/L	CCVMissi
CHLOROFORM	6	U	U	3	6	UG/L	
CHLOROMETHANE	26	R	U	1.8	26	UG/L	CCVMissi
CIS-1,2-DICHLOROETHENE	54			1.6	24	UG/L	
CIS-1,3-DICHLOROPROPENE	20	U	U	2.2	20	UG/L	
DIBROMOCHLOROMETHANE	10	U	U	3.2	10	UG/L	
DIBROMOFLUOROMETHANE	105			2	2	ERCEN	
DIBROMOMETHANE	48	U	U	4	48	UG/L	
DICHLORODIFLUOROMETHANE	20	R	U	7.2	20	UG/L	BD%R
DICHLORODIFLUOROMETHANE	20	R	U	7.2	20	UG/L	CCVMissi
DICHLORODIFLUOROMETHANE	20	R	U	7.2	20	UG/L	CV%D
ETHYLBENZENE	12	U	U	2.4	12	UG/L	
HEXACHLOROBUTADIENE	22	U	U	4	22	UG/L	
ISOPROPYLBENZENE	10	U	U	2.6	10	UG/L	
M,P-XYLENE	26	U	U	4.4	26	UG/L	
METHYLENE CHLORIDE	20	R		4.2	6	UG/L	SSCCV%
METHYLENE CHLORIDE	20	R		4.2	6	UG/L	CV%D
METHYLENE CHLORIDE	20	R		4.2	6	UG/L	IC%RSI
N-BUTYLBENZENE	22	U	U	2.2	22	UG/L	
N-PROPYLBENZENE	8	U	U	1.8	8	UG/L	
NAPHTHALENE	8	U	U	2.4	8	UG/L	
O-XYLENE	22	U	U	2.6	22	UG/L	
P-ISOPROPYLTOLUENE	24	U	U	1.8	24	UG/L	
SEC-BUTYLBENZENE	26	U	U	2.4	26	UG/L	
STYRENE	8	U	U	2.4	8	UG/L	
TERT-BUTYLBENZENE	28	U	U	2.6	28	UG/L	
TETRACHLOROETHENE	36			3.4	28	UG/L	
TOLUENE	22	U	U	2.8	22	UG/L	
TOLUENE-D8	114			2	2	ERCEN	
TRANS-1,2-DICHLOROETHENE	12	U	U	1.8	12	UG/L	
TRANS-1,3-DICHLOROPROPENE	20	U	U	3.4	20	UG/L	
TRICHLOROETHENE	520			2	20	UG/L	
TRICHLOROFUOROMETHANE	16	R	U	4.4	16	UG/L	CCVMissi
VINYL CHLORIDE	22	R	U	3.2	22	UG/L	CCVMissi

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA105	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.148	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	U	U	0.16	1	UG/L	
	1,1-DICHLOROETHANE	0.4	U	U	0.11	0.4	UG/L	
	1,1-DICHLOROETHENE	1.2	U	U	0.15	1.2	UG/L	
	1,1-DICHLOROPROPENE	1	U	U	0.14	1	UG/L	
	1,2,3-TRICHLOROBENZENE	0.3	U	U	0.15	0.3	UG/L	
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	U	U	0.13	0.4	UG/L	
	1,2,4-TRIMETHYLBENZENE	1.3	U	U	0.09	1.3	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	2.6	U	U	0.25	2.6	UG/L	
	1,2-DIBROMOETHANE	0.6	U	U	0.19	0.6	UG/L	
	1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
	1,2-DICHLOROETHANE	0.6	U	U	0.33	0.6	UG/L	

1,2-DICHLOROPROPANE	0.4	U	U	0.09	0.4	UG/L	
1,3,5-TRIMETHYLBENZENE	0.5	U	U	0.1	0.5	UG/L	
1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
1,3-DICHLOROPROPANE	0.4	U	U	0.15	0.4	UG/L	
1,4-DICHLOROBENZENE	0.3	U	U	0.12	0.3	UG/L	
1-CHLOROHEXANE	0.5	R	U	0.14	0.5	UG/L	CCVMissi
2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L	
2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	
4-BROMOFLUOROBENZENE	116			0.1	0.1	ERCEN	
4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L	
BENZENE	0.4	U	U	0.1	0.4	UG/L	
BROMOBENZENE	0.3	U	U	0.09	0.3	UG/L	
BROMOCHLOROMETHANE	0.4	U	U	0.18	0.4	UG/L	
BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L	
BROMOFORM	1.2	U	U	0.18	1.2	UG/L	
BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	CCVMissi
CARBON TETRACHLORIDE	2.1	U	U	0.16	2.1	UG/L	
CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	
CHLOROETHANE	1	R	U	0.3	1	UG/L	CCVMissi
CHLOROFORM	0.3	U	U	0.15	0.3	UG/L	
CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	CCVMissi
CIS-1,2-DICHLOROETHENE	2.7			0.08	1.2	UG/L	
CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L	
DIBROMOCHLOROMETHANE	0.5	U	U	0.16	0.5	UG/L	
DIBROMOFLUOROMETHANE	106			0.1	0.1	ERCEN	
DIBROMOMETHANE	2.4	U	U	0.2	2.4	UG/L	
DICHLORODIFLUOROMETHANI	1	R	U	0.36	1	UG/L	BD%R
DICHLORODIFLUOROMETHANI	1	R	U	0.36	1	UG/L	CCVMissi
DICHLORODIFLUOROMETHANI	1	R	U	0.36	1	UG/L	CV%D
ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L	
HEXA-CHLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L	
ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L	
- M,P-XYLENE	1.3	U	U	0.22	1.3	UG/L	
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BD%R
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BS%R
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	CV%D
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	IC%RSI
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	SSCCV%
N-BUTYLBENZENE	1.1	U	U	0.11	1.1	UG/L	
N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L	
NAPHTHALENE	0.4	U	U	0.12	0.4	UG/L	
O-XYLENE	1.1	U	U	0.13	1.1	UG/L	
P-ISOPROPYLtolUENE	1.2	U	U	0.09	1.2	UG/L	
SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L	
STYRENE	0.4	U	U	0.12	0.4	UG/L	
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L	
TETRA-CHLOROETHENE	1.4	U	U	0.17	1.4	UG/L	
TOLUENE	1.1	U	U	0.14	1.1	UG/L	
TOLUENE-D8	112			0.1	0.1	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.6	U	U	0.09	0.6	UG/L	
TRANS-1,3-DICHLOROPROPENI	1	U	U	0.17	1	UG/L	
TRICHLOROETHENE	35			0.1	1	UG/L	
TRICHLOROFLUOROMETHANE	0.8	R	U	0.22	0.8	UG/L	CCVMissi
VINYL CHLORIDE	1.1	R	U	0.16	1.1	UG/L	CCVMissi

6521283

9712240 SW8260A

Page 16 of 23

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA106	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.148	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	U	U	0.16	1	UG/L	
	1,1-DICHLOROETHANE	0.4	U	U	0.11	0.4	UG/L	
	1,1-DICHLOROETHENE	1.2	U	U	0.15	1.2	UG/L	
	1,1-DICHLOROPROPENE	1	U	U	0.14	1	UG/L	
	1,2,3-TRICHLOROBENZENE	0.3	U	U	0.15	0.3	UG/L	
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	U	U	0.13	0.4	UG/L	
	1,2,4-TRIMETHYLBENZENE	1.3	U	U	0.09	1.3	UG/L	
	2-DIBROMO-3-CHLOROPROPAN	2.6	U	U	0.25	2.6	UG/L	
	1,2-DIBROMOETHANE	0.6	U	U	0.19	0.6	UG/L	
	1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
	1,2-DICHLOROETHANE	0.6	U	U	0.33	0.6	UG/L	
	1,2-DICHLOROPROPANE	0.4	U	U	0.09	0.4	UG/L	
	1,3,5-TRIMETHYLBENZENE	0.5	U	U	0.1	0.5	UG/L	
	1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
	1,3-DICHLOROPROPANE	0.4	U	U	0.15	0.4	UG/L	
	1,4-DICHLOROBENZENE	0.3	U	U	0.12	0.3	UG/L	
	t-CHLOROHEXANE	0.5	R	U	0.14	0.5	UG/L	CCVMissi
	2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L	
	2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	
	4-BROMOFLUOROBENZENE	110			0.1	0.1	ERCEN	
	4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L	
	BENZENE	0.4	U	U	0.1	0.4	UG/L	
	BROMOBENZENE	0.3	U	U	0.09	0.3	UG/L	
	BROMOCHLOROMETHANE	0.4	U	U	0.18	0.4	UG/L	
	BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L	
	BROMOFORM	1.2	U	U	0.18	1.2	UG/L	
	BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	CCVMissi
	CARBON TETRACHLORIDE	2.1	U	U	0.16	2.1	UG/L	
	CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	
	CHLOROETHANE	1	R	U	0.3	1	UG/L	CCVMissi
	CHLOROFORM	0.3	U	U	0.15	0.3	UG/L	
	CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	CCVMissi
	CIS-1,2-DICHLOROETHENE	1.2	U	U	0.08	1.2	UG/L	
	CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L	
	DIBROMOCHLOROMETHANE	0.5	U	U	0.16	0.5	UG/L	
	DIBROMOFLUOROMETHANE	110			0.1	0.1	ERCEN	
	DIBROMOMETHANE	2.4	U	U	0.2	2.4	UG/L	
	DICHLORODIFLUOROMETHANI	1	R	U	0.36	1	UG/L	BD%R
	DICHLORODIFLUOROMETHANI	1	R	U	0.36	1	UG/L	CCVMissi
	DICHLORODIFLUOROMETHANI	1	R	U	0.36	1	UG/L	CV%D
	ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L	
	HEXAChLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L	
	ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L	
	M,P-XYLENE	1.3	U	U	0.22	1.3	UG/L	
	METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BD%R
	METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BS%R
	METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	CV%D
	METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	IC%RSI
	METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	SSCCV%
	N-BUTYLBENZENE	1.1	U	U	0.11	1.1	UG/L	

N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L	
NAPHTHALENE	0.4	U	U	0.12	0.4	UG/L	
O-XYLENE	1.1	U	U	0.13	1.1	UG/L	
P-ISOPROPYLTOLUENE	1.2	U	U	0.09	1.2	UG/L	
SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L	
STYRENE	0.4	U	U	0.12	0.4	UG/L	
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L	
TETRACHLOROETHENE	1.4	U	U	0.17	1.4	UG/L	
TOLUENE	1.1	U	U	0.14	1.1	UG/L	
TOLUENE-D8	112			0.1	0.1	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.6	U	U	0.09	0.6	UG/L	
TRANS-1,3-DICHLOROPROPENE	1	U	U	0.17	1	UG/L	
TRICHLOROETHENE	1	U	U	0.1	1	UG/L	
TRICHLOROFLUOROMETHANE	0.8	R	U	0.22	0.8	UG/L	CCVMiss
VINYL CHLORIDE	11	R	U	0.16	1.1	UG/L	CCVMiss

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA107	1,1,1,2-TETRACHLOROETHANE	2	U	U	0.592	2	UG/L	
	1,1,1-TRICHLOROETHANE	32	U	U	0.52	3.2	UG/L	
	1,1,2,2-TETRACHLOROETHANE	16	U	U	0.68	1.6	UG/L	
	1,1,2-TRICHLOROETHANE	4	U	U	0.64	4	UG/L	
	1,1-DICHLOROETHANE	1.6	U	U	0.44	1.6	UG/L	
	1,1-DICHLOROETHENE	4.8	U	U	0.6	4.8	UG/L	
	1,1-DICHLOROPROPENE	4	U	U	0.56	4	UG/L	
	1,2,3-TRICHLOROBENZENE	1.2	U	U	0.6	1.2	UG/L	
	1,2,3-TRICHLOROPROPANE	13	U	U	0.6	13	UG/L	
	1,2,4-TRICHLOROBENZENE	16	U	U	0.52	1.6	UG/L	
	1,2,4-TRIMETHYLBENZENE	52	U	U	0.36	52	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	10	U	U	1	10	UG/L	
	1,2-DIBROMOETHANE	2.4	U	U	0.76	2.4	UG/L	
	1,2-DICHLOROBENZENE	12	U	U	0.4	1.2	UG/L	
	1,2-DICHLOROETHANE	24	U	U	1.32	2.4	UG/L	
	1,2-DICHLOROPROPANE	1.6	U	U	0.36	1.6	UG/L	
	1,3,5-TRIMETHYLBENZENE	2	U	U	0.4	2	UG/L	
	1,3-DICHLOROBENZENE	4.8	U	U	0.2	4.8	UG/L	
	1,3-DICHLOROPROPANE	1.6	U	U	0.6	1.6	UG/L	
	1,4-DICHLOROBENZENE	12	U	U	0.48	1.2	UG/L	
	1-CHLOROHEXANE	2	R	U	0.56	2	UG/L	CCVMiss
	2,2-DICHLOROPROPANE	14	U	U	1.28	14	UG/L	
	2-CHLOROTOLUENE	16	U	U	0.4	1.6	UG/L	
	4-BROMOFLUOROBENZENE	121			0.4	0.4	ERCEN	
	4-CHLOROTOLUENE	2.4	U	U	0.32	2.4	UG/L	
	BENZENE	1.6	U	U	0.4	1.6	UG/L	
	BROMOBENZENE	12	U	U	0.36	1.2	UG/L	
	BROMOCHLOROMETHANE	16	U	U	0.72	1.6	UG/L	
	BROMODICHLOROMETHANE	32	U	U	0.4	3.2	UG/L	
	BROMOFORM	48	U	U	0.72	4.8	UG/L	
	BROMOMETHANE	44	R	U	0.8	4.4	UG/L	CCVMiss
	CARBON TETRACHLORIDE	84	U	U	0.64	8.4	UG/L	
	CHLOROBENZENE	1.6	U	U	0.48	1.6	UG/L	
	CHLOROETHANE	4	R	U	12	4	UG/L	CCVMiss
	CHLOROFORM	1.2	U	U	0.6	1.2	UG/L	
	CHLOROMETHANE	52	R	U	0.36	5.2	UG/L	CCVMiss
	CIS-1,2-DICHLOROETHENE	48	U	U	0.32	4.8	UG/L	
	CIS-1,3-DICHLOROPROPENE	4	U	U	0.44	4	UG/L	

6521285

9712240 SW8260A

Page 18 of 23

DIBROMOCHLOROMETHANE	2	U	U	0.64	2	UG/L	
DIBROMOFLUOROMETHANE	105			0.4	0.4	ERCEN	
DIBROMOMETHANE	9.6	U	U	0.8	9.6	UG/L	
DICHLORODIFLUOROMETHANE	4	R	U	1.44	4	UG/L	CV%D
DICHLORODIFLUOROMETHANE	4	R	U	1.44	4	UG/L	BD%R
DICHLORODIFLUOROMETHANE	4	R	U	1.44	4	UG/L	CCVMiss
ETHYLBENZENE	2.4	U	U	0.48	2.4	UG/L	
HEXACHLOROBUTADIENE	4.4	U	U	0.8	4.4	UG/L	
ISOPROPYLBENZENE	39			0.52	2	UG/L	
M,P-XYLENE	5.2	U	U	0.88	5.2	UG/L	
METHYLENE CHLORIDE	3.6	R	U	0.84	1.2	UG/L	IC%RSI
METHYLENE CHLORIDE	3.6	R	U	0.84	1.2	UG/L	SSCCV%
METHYLENE CHLORIDE	3.6	R	U	0.84	1.2	UG/L	CV%D
METHYLENE CHLORIDE	3.6	R	U	0.84	1.2	UG/L	BS%R
METHYLENE CHLORIDE	3.6	R	U	0.84	1.2	UG/L	BD%R
N-BUTYLBENZENE	7.5			0.44	4.4	UG/L	
N-PROPYLBENZENE	43			0.36	1.6	UG/L	
NAPHTHALENE	97			0.48	1.6	UG/L	
O-XYLENE	4.4	U	U	0.52	4.4	UG/L	
P-ISOPROPYL TOLUENE	4.8	U	U	0.36	4.8	UG/L	
SEC-BUTYLBENZENE	14			0.48	5.2	UG/L	
STYRENE	1.6	U	U	0.48	1.6	UG/L	
TERT-BUTYLBENZENE	2.5	F	F	0.52	5.6	UG/L	
TETRACHLOROETHENE	5.6	U	U	0.68	5.6	UG/L	
TOLUENE	4.4	U	U	0.56	4.4	UG/L	
TOLUENE-D8	114			0.4	0.4	ERCEN	
TRANS-1,2-DICHLOROETHENE	2.4	U	U	0.36	2.4	UG/L	
TRANS-1,3-DICHLOROPROPENE	4	U	U	0.68	4	UG/L	
TRICHLOROETHENE	4	U	U	0.4	4	UG/L	
TRICHLOROFUOROMETHANE	3.2	R	U	0.88	3.2	UG/L	CCVMiss
VINYL CHLORIDE	4.4	R	U	0.64	4.4	UG/L	CCVMiss

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA108	1,1,1,2-TETRACHLOROETHANE	2.5	U	U	0.74	2.5	UG/L	
	1,1,1-TRICHLOROETHANE	4	U	U	0.65	4	UG/L	
	1,1,2,2-TETRACHLOROETHANE	2	U	U	0.85	2	UG/L	
	1,1,2-TRICHLOROETHANE	5	U	U	0.8	5	UG/L	
	1,1-DICHLOROETHANE	2	U	U	0.55	2	UG/L	
	1,1-DICHLOROETHENE	6	U	U	0.75	6	UG/L	
	1,1-DICHLOROPROPENE	5	U	U	0.7	5	UG/L	
	1,2,3-TRICHLOROBENZENE	1.5	U	U	0.75	1.5	UG/L	
	1,2,3-TRICHLOROPROPANE	16	U	U	0.75	16	UG/L	
	1,2,4-TRICHLOROBENZENE	2	U	U	0.65	2	UG/L	
	1,2,4-TRIMETHYLBENZENE	6.5	U	U	0.45	6.5	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	13	U	U	1.25	13	UG/L	
	1,2-DIBROMOETHANE	3	U	U	0.95	3	UG/L	
	1,2-DICHLOROBENZENE	1.5	U	U	0.5	1.5	UG/L	
	1,2-DICHLOROETHANE	3	U	U	1.65	3	UG/L	
	1,2-DICHLOROPROPANE	2	U	U	0.45	2	UG/L	
	1,3,5-TRIMETHYLBENZENE	2.5	U	U	0.5	2.5	UG/L	
	1,3-DICHLOROBENZENE	6	U	U	0.25	6	UG/L	
	1,3-DICHLOROPROPANE	2	U	U	0.75	2	UG/L	
	1,4-DICHLOROBENZENE	1.5	U	U	0.6	1.5	UG/L	
	1-CHLOROHEXANE	2.5	R	U	0.7	2.5	UG/L	CCVMiss
	2,2-DICHLOROPROPANE	18	U	U	1.6	18	UG/L	CCVMiss

2-CHLOROTOLUENE	2	U	U	0.5	2	UG/L
4-BROMOFLUOROBENZENE	106	U	U	0.5	0.5	ERCEN
4-CHLOROTOLUENE	3	U	U	0.4	3	UG/L
BENZENE	2	U	U	0.5	2	UG/L
BROMOBENZENE	1.5	U	U	0.45	1.5	UG/L
BROMOCHLOROMETHANE	2	U	U	0.9	2	UG/L
BROMODICHLOROMETHANE	4	U	U	0.5	4	UG/L
BROMOFORM	6	U	U	0.9	6	UG/L
BROMOMETHANE	5.5	R	U	1	5.5	UG/L
CARBON TETRACHLORIDE	11	U	U	0.8	11	UG/L
CHLOROBENZENE	2	U	U	0.6	2	UG/L
CHLOROETHANE	5	R	U	1.5	5	UG/L
CHLOROFORM	1.5	U	U	0.75	1.5	UG/L
CHLOROMETHANE	6.5	R	U	0.45	6.5	UG/L
CIS-1,2-DICHLOROETHENE	57	U	U	0.4	6	UG/L
CIS-1,3-DICHLOROPROPENE	5	U	U	0.55	5	UG/L
DIBROMOCHLOROMETHANE	2.5	U	U	0.8	2.5	UG/L
DIBROMOFLUOROMETHANE	97	U	U	0.5	0.5	ERCEN
DIBROMOMETHANE	12	U	U	1	12	UG/L
DICHLORODIFLUOROMETHANI	5	R	U	1.8	5	UG/L
DICHLORODIFLUOROMETHANI	5	R	U	1.8	5	UG/L
DICHLORODIFLUOROMETHANI	5	R	U	1.8	5	UG/L
ETHYLBENZENE	3	U	U	0.6	3	UG/L
HEXAChLOROBUTADIENE	5.5	U	U	1	5.5	UG/L
ISOPROPYLBENZENE	2.5	U	U	0.65	2.5	UG/L
M,P-XYLENE	6.5	U	U	1.1	6.5	UG/L
METHYLENE CHLORIDE	4.2	R	U	1.05	1.5	UG/L
METHYLENE CHLORIDE	4.2	R	U	1.05	1.5	UG/L
METHYLENE CHLORIDE	4.2	R	U	1.05	1.5	UG/L
METHYLENE CHLORIDE	4.2	R	U	1.05	1.5	UG/L
METHYLENE CHLORIDE	4.2	R	U	1.05	1.5	UG/L
N-BUTYLBENZENE	5.5	U	U	0.55	5.5	UG/L
N-PROPYLBENZENE	2	U	U	0.45	2	UG/L
NAPHTHALENE	2	U	U	0.6	2	UG/L
O-XYLENE	5.5	U	U	0.65	5.5	UG/L
P-ISOPROPYLtolUENE	6	U	U	0.45	6	UG/L
SEC-BUTYLBENZENE	6.5	U	U	0.6	6.5	UG/L
STYRENE	2	U	U	0.6	2	UG/L
TERT-BUTYLBENZENE	7	U	U	0.65	7	UG/L
TETRACHLOROETHENE	7	U	U	0.85	7	UG/L
TOLUENE	5.5	U	U	0.7	5.5	UG/L
TOLUENE-D8	113	U	U	0.5	0.5	ERCEN
TRANS-1,2-DICHLOROETHENE	85	U	U	0.45	3	UG/L
TRANS-1,3-DICHLOROPROPENE	5	U	U	0.85	5	UG/L
TRICHLOROETHENE	13	U	U	0.5	5	UG/L
TRICHLOROFUOROMETHANE	4	R	U	1.1	4	UG/L
VINYL CHLORIDE	5.5	R	U	0.8	5.5	UG/L

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA109FD1	1,1,1,2-TETRACHLOROETHANE	2.5	U	U	0.74	2.5	UG/L	
	1,1,1-TRICHLOROETHANE	4	U	U	0.65	4	UG/L	
	1,1,2,2-TETRACHLOROETHANE	2	U	U	0.85	2	UG/L	
	1,1,2-TRICHLOROETHANE	5	U	U	0.8	5	UG/L	
	1,1-DICHLOROETHANE	2	U	U	0.55	2	UG/L	
	1,1-DICHLOROETHENE	6	U	U	0.75	6	UG/L	

1,1-DICHLOROPROPENE	5	U	U	0.7	5	UG/L
1,2,3-TRICHLOROBENZENE	1.5	U	U	0.75	1.5	UG/L
1,2,3-TRICHLOROPROPANE	16	U	U	0.75	16	UG/L
1,2,4-TRICHLOROBENZENE	2	U	U	0.65	2	UG/L
1,2,4-TRIMETHYLBENZENE	6.5	U	U	0.45	6.5	UG/L
2-DIBROMO-3-CHLOROPROPANE	13	U	U	1.25	13	UG/L
1,2-DIBROMOETHANE	3	U	U	0.95	3	UG/L
1,2-DICHLOROBENZENE	1.5	U	U	0.5	1.5	UG/L
1,2-DICHLOROETHANE	3	U	U	1.65	3	UG/L
1,2-DICHLOROPROPANE	2	U	U	0.45	2	UG/L
1,3,5-TRIMETHYLBENZENE	2.5	U	U	0.5	2.5	UG/L
1,3-DICHLOROBENZENE	6	U	U	0.25	6	UG/L
1,3-DICHLOROPROPANE	2	U	U	0.75	2	UG/L
1,4-DICHLOROBENZENE	1.5	U	U	0.6	1.5	UG/L
1-CHLOROHEXANE	2.5	R	U	0.7	2.5	UG/L
2,2-DICHLOROPROPANE	18	U	U	1.6	18	UG/L
2-CHLOROTOLUENE	2	U	U	0.5	2	UG/L
4-BROMOFLUOROBENZENE	120			0.5	0.5	ERCEN
4-CHLOROTOLUENE	3	U	U	0.4	3	UG/L
BENZENE	2	U	U	0.5	2	UG/L
BROMOBENZENE	1.5	U	U	0.45	1.5	UG/L
BROMOCHLOROMETHANE	2	U	U	0.9	2	UG/L
BROMODICHLOROMETHANE	4	U	U	0.5	4	UG/L
BROMOFORM	6	U	U	0.9	6	UG/L
BROMOMETHANE	5.5	R	U	1	5.5	UG/L
CARBON TETRACHLORIDE	11	U	U	0.8	11	UG/L
CHLOROBENZENE	2	U	U	0.6	2	UG/L
CHLOROETHANE	5	R	U	1.5	5	UG/L
CHLOROFORM	1.5	U	U	0.75	1.5	UG/L
CHLOROMETHANE	6.5	R	U	0.45	6.5	UG/L
CIS-1,2-DICHLOROETHENE	6	U	U	0.4	6	UG/L
CIS-1,3-DICHLOROPROPENE	5	U	U	0.55	5	UG/L
DIBROMOCHLOROMETHANE	2.5	U	U	0.8	2.5	UG/L
DIBROMOFLUOROMETHANE	101			0.5	0.5	ERCEN
DIBROMOMETHANE	12	U	U	1	12	UG/L
DICHLORODIFLUOROMETHANI	5	R	U	1.8	5	UG/L
DICHLORODIFLUOROMETHANI	5	R	U	1.8	5	UG/L
DICHLORODIFLUOROMETHANI	5	R	U	1.8	5	UG/L
ETHYLBENZENE	3	U	U	0.6	3	UG/L
HEXAChLOROBUTADIENE	5.5	U	U	1	5.5	UG/L
ISOPROPYLBENZENE	42			0.65	2.5	UG/L
M,P-XYLENE	6.5	U	U	1.1	6.5	UG/L
METHYLENE CHLORIDE	4.4	R	U	1.05	1.5	UG/L
METHYLENE CHLORIDE	4.4	R	U	1.05	1.5	UG/L
METHYLENE CHLORIDE	4.4	R	U	1.05	1.5	UG/L
METHYLENE CHLORIDE	4.4	R	U	1.05	1.5	UG/L
METHYLENE CHLORIDE	4.4	R	U	1.05	1.5	UG/L
N-BUTYLBENZENE	7.8			0.55	5.5	UG/L
N-PROPYLBENZENE	50			0.45	2	UG/L
NAPHTHALENE	90			0.6	2	UG/L
O-XYLENE	5.5	U	U	0.65	5.5	UG/L
P-ISOPROPYLtolUENE	6	U	U	0.45	6	UG/L
SEC-BUTYLBENZENE	15			0.6	6.5	UG/L
STYRENE	2	U	U	0.6	2	UG/L
TERT-BUTYLBENZENE	2.9	F	F	0.65	7	UG/L
TETRAChLOROETHENE	7	U	U	0.85	7	UG/L

CCVMissi

CCVMissi

CCVMissi

CCVMissi

BD%R

CCVMissi

CV%D

SSCCV%

CV%D

IC%RSI

BD%R

BS%R

6521288

TOLUENE	5.5	U	U	0.7	5.5	UG/L
TOLUENE-D8	104			0.5	0.5	ERCEN
TRANS-1,2-DICHLOROETHENE	3	U	U	0.45	3	UG/L
TRANS-1,3-DICHLOROPROPENE	5	U	U	0.85	5	UG/L
TRICHLOROETHENE	5	U	U	0.5	5	UG/L
TRICHLOROFLUOROMETHANE	4	R	U	11	4	UG/L
VINYL CHLORIDE	55	R	U	0.8	55	UG/L
						CCVMissi
						CCVMissi

6521289

9712240 SW8260A

Page 22 of 23

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

6521291

NAS FW JRB AOC 2

Data Quality Evaluation

CH2MHILL

SDG 9712254

Method SW9060

Reviewer nh

Date 4/16/98

Matrix water

Senior Review Vito D'Aurora

Field Samples Samples 3 and 5 reported detects > the RL.

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
-----------------	------------------	-----------------	------------------	-----------------	------------------

Water

AHA056EB1	EB	AHA056EB1MS	MS	AHA056EB1SD	SD
AHA057	N	AHA058	N	AHA059	N

1. Case Narrative Items of Interest 1. All reagent blanks were < the RL.

2. Blank Summary

Field Blanks Total Organic Carbon was not detected in the equipment blank.

Method Blanks All reagent blanks were < the RL.

3. Spikes and Duplicates

Field Duplicates None.

Laboratory Duplicates All RPD criteria were met.

Matrix Spike All criteria were met.

6521292

9712254 SW9060

Page 2 of 6

4. Laboratory Control Sample None

5. Surrogates Not applicable.

6. Tuning and Mass Not applicable.
Calibration

7. Internal Standard Not applicable.

8. Calibration Information

Initial Calibration All criteria were met.

Continuing Calibration All criteria were met.

9. Holding Time Holding times were met.

10. Summary

General Comments All criteria were met. No flagging needed.

Data Package Completeness 1. No LCS provided.
 2. The RL and MDL values were identical as listed in the Edata.

Forms Review/ Items of Samples 3 and 5 reported detects > the RL.
Interest

9712254 SW9060

Page 3 of 6

6521293

6521293

COC Review Complete.

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA057	TOTAL ORGANIC CARBON	3			1	1	MG/L	
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA058	TOTAL ORGANIC CARBON	1	U	U	1	1	MG/L	
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA059	TOTAL ORGANIC CARBON	3			1	1	MG/L	

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not requested
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

6521296

9712254 SW9060

Page 6 of 6

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

NAS FW JRB AOC 2**Data Quality Evaluation****CH2MHILL****SDG 9712254****Method SW8260A**

Reviewer nh

Date 4/15/98

Matrix water

Senior Review Vito D'Aurora

Field Samples

No items to note.

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
-----------------	------------------	-----------------	------------------	-----------------	------------------

Water

AHA056EB1	EB	AHA057	N	AHA058	N
AHA059	N	-LABQC	BD		

**1. Case Narrative
Items of Interest**

1. Methylene Chloride was detected > the RL in the method blank. This compound was detected < the calculated value in sample 2, so the data were flagged U (by the lab).
2. MS/MSDs were not performed due to insufficient sample volume.
3. Several compounds from the ICV/CCV order curve were within the acceptance limit but exceeded the 15% RSD criteria. These were quantitated using the average response factor due to software problem.

2. Blank Summary

Field Blanks Methylene Chloride was detected > the RL in the EB. This compound was not detected in any of the samples.

Method Blanks Methylene Chloride was detected > the RL in the method blank. This compound was detected < the calculated value in sample 2, so the data were flagged U (by the lab).

<u>Blank Type</u>	<u>Blank ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Report Limit</u>	<u>LabFlag</u>	<u>Units</u>
LB	LABQC	METHYLENE CHLORI	0.86	0.21		UG/L

3. Spikes and Duplicates

Field Duplicates None in this SDG.

Laboratory Duplicates None.

Matrix Spike MS/MSDs were not performed due to insufficient sample volume.

4. Laboratory Control Sample All criteria were met.

5. Surrogates All criteria were met.

6. Tuning and Mass Calibration All criteria met.

7. Internal Standard All internal standard recoveries were within acceptance criteria.

8. Calibration Information

Initial Calibration Methylene Chloride exceeded the % RSD in the ICAL from 12/29/97 and the samples were flagged R.

<u>Field ID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation Reason</u>
AHA057	METHYLENE CHLORIDE	R	IC%RSD
AHA058	METHYLENE CHLORIDE	R	IC%RSD
AHA059	METHYLENE CHLORIDE	R	IC%RSD

Continuing Calibration 1. Seven compounds were missing from the second source CCV from 12/26/97. Methylene Chloride exceeded 25% of the expected value. The samples were validated with an R flag.
2. A CCV was not included in the package.

<u>Field ID</u>	<u>LabsampleID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation</u>
AHA057	9712254-3	1-CHLOROHEXANE	R	CCVMiss
AHA057	9712254-3	BROMOMETHANE	R	CCVMiss

AHA057	9712254-3	CHLOROETHANE	R	CCVMiss
AHA057	9712254-3	CHLOROMETHANE	R	CCVMiss
AHA057	9712254-3	1,1CHLORODIFLUOROMETHANE	R	CCVMiss
AHA057	9712254-3	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA057	9712254-3	VINYL CHLORIDE	R	CCVMiss
AHA058	9712254-4	1-CHLOROHEXANE	R	CCVMiss
AHA058	9712254-4	BROMOMETHANE	R	CCVMiss
AHA058	9712254-4	CHLOROETHANE	R	CCVMiss
AHA058	9712254-4	CHLOROMETHANE	R	CCVMiss
AHA058	9712254-4	1,1CHLORODIFLUOROMETHANE	R	CCVMiss
AHA058	9712254-4	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA058	9712254-4	VINYL CHLORIDE	R	CCVMiss
AHA059	9712254-5	1-CHLOROHEXANE	R	CCVMiss
AHA059	9712254-5	BROMOMETHANE	R	CCVMiss
AHA059	9712254-5	CHLOROETHANE	R	CCVMiss
AHA059	9712254-5	CHLOROMETHANE	R	CCVMiss
AHA059	9712254-5	1,1CHLORODIFLUOROMETHANE	R	CCVMiss
AHA059	9712254-5	TRICHLOROFLUOROMETHANE	R	CCVMiss
AHA059	9712254-5	VINYL CHLORIDE	R	CCVMiss

• Holding Time

Holding times were met.

10. Summary

General Comments 1. Methylene Chloride exceeded the % RSD in the ICAL from 12/29/97 and the samples were flagged R.
 2. Seven compounds were missing from the second source CCV from 12/26/97. Methylene Chloride exceeded 25% of the expected value. The samples were validated with an R flag.

Data Package Completeness A CCV was not included in the package and the Form 5A and 8A did not include the samples for this SDG. Spoke with Lori 4/15/98 and received faxes that day.

Forms Review/ Items of Interest No items to note.

COC Review Complete.

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA057	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.148	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	U	U	0.16	1	UG/L	
	1,1-DICHLOROETHANE	0.4	U	U	0.11	0.4	UG/L	
	1,1-DICHLOROETHENE	1.2	U	U	0.15	1.2	UG/L	
	1,1-DICHLOROPROPENE	1	U	U	0.14	1	UG/L	
	1,2,3-TRICHLOROBENZENE	0.3	U	U	0.15	0.3	UG/L	
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	U	U	0.13	0.4	UG/L	
	1,2,4-TRIMETHYLBENZENE	1.3	U	U	0.09	1.3	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	2.6	U	U	0.25	2.6	UG/L	
	1,2-DIBROMOETHANE	0.6	U	U	0.19	0.6	UG/L	
	1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
	1,2-DICHLOROETHANE	0.6	U	U	0.33	0.6	UG/L	
	1,2-DICHLOROPROPANE	0.4	U	U	0.09	0.4	UG/L	
	1,3,5-TRIMETHYLBENZENE	0.5	U	U	0.1	0.5	UG/L	
	1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
	1,3-DICHLOROPROPANE	0.4	U	U	0.15	0.4	UG/L	
	1,4-DICHLOROBENZENE	0.3	U	U	0.12	0.3	UG/L	
	1-CHLOROHEXANE	0.5	R	U	0.14	0.5	UG/L	CCVMissi
	2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L	
	2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	
	4-BROMOFLUOROBENZENE	109			0.1	0.1	ERCEN	
	4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L	
	BENZENE	0.4	U	U	0.1	0.4	UG/L	
	BROMOBENZENE	0.3	U	U	0.09	0.3	UG/L	
	BROMOCHLOROMETHANE	0.4	U	U	0.18	0.4	UG/L	
	BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L	
	BROMOFORM	1.2	U	U	0.18	1.2	UG/L	
	BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	CCVMissi
	CARBON TETRACHLORIDE	2.1	U	U	0.16	2.1	UG/L	
	CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	
	CHLOROETHANE	1	R	U	0.3	1	UG/L	CCVMissi
	CHLOROFORM	0.3	U	U	0.15	0.3	UG/L	
	CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	CCVMissi
	CIS-1,2-DICHLOROETHENE	1.2	U	U	0.08	1.2	UG/L	
	CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L	
	DIBROMOCHLOROMETHANE	0.5	U	U	0.16	0.5	UG/L	
	DIBROMOFLUOROMETHANE	113			0.1	0.1	ERCEN	
	DIBROMOMETHANE	2.4	U	U	0.2	2.4	UG/L	
	DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L	CCVMissi
	ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L	
	HEXAChLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L	
	ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L	
	M,P-XYLENE	1.3	U	U	0.22	1.3	UG/L	
	METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	IC%RSI

6521301

							SSCCV%
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	
N-BUTYLBENZENE	1.1	U	U	0.11	1.1	UG/L	
N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L	
NAPHTHALENE	0.34	F	F	0.12	0.4	UG/L	
O-XYLENE	1.1	U	U	0.13	1.1	UG/L	
P-ISOPROPYLtolUENE	1.2	U	U	0.09	1.2	UG/L	
SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L	
STYRENE	0.4	U	U	0.12	0.4	UG/L	
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L	
TETRACHLOROETHENE	1.4	U	U	0.17	1.4	UG/L	
TOLUENE	1.1	U	U	0.14	1.1	UG/L	
TOLUENE-D8	104			0.1	0.1	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.6	U	U	0.09	0.6	UG/L	
TRANS-1,3-DICHLOROPROPENE	1	U	U	0.17	1	UG/L	
TRICHLOROETHENE	1	U	U	0.1	1	UG/L	
TRICHLOROFUOROMETHANE	0.8	R	U	0.22	0.8	UG/L	CCVMissi
VINYL CHLORIDE	11	R	U	0.16	1.1	UG/L	CCVMissi

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA053	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.148	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	U	U	0.16	1	UG/L	
	1,1-DICHLOROETHANE	0.4	U	U	0.11	0.4	UG/L	
	1,1-DICHLOROETHENE	1.2	U	U	0.15	1.2	UG/L	
	1,1-DICHLOROPROPENE	1	U	U	0.14	1	UG/L	
	1,2,3-TRICHLOROBENZENE	0.3	U	U	0.15	0.3	UG/L	
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	U	U	0.13	0.4	UG/L	
	1,2,4-TRIMETHYLBENZENE	1.3	U	U	0.09	1.3	UG/L	
	2-DIBROMO-3-CHLOROPROPAN	2.6	U	U	0.25	2.6	UG/L	
	1,2-DIBROMOETHANE	0.6	U	U	0.19	0.6	UG/L	
	1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
	1,2-DICHLOROETHANE	0.6	U	U	0.33	0.6	UG/L	
	1,2-DICHLOROPROPANE	0.4	U	U	0.09	0.4	UG/L	
	1,3,5-TRIMETHYLBENZENE	0.5	U	U	0.1	0.5	UG/L	
	1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
	1,3-DICHLOROPROPANE	0.4	U	U	0.15	0.4	UG/L	
	1,4-DICHLOROBENZENE	0.3	U	U	0.12	0.3	UG/L	
	1-CHLOROHEXANE	0.5	R	U	0.14	0.5	UG/L	CCVMissi
	2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L	
	2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	
	4-BROMOFLUOROBENZENE	108			0.1	0.1	ERCEN	
	4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L	
	BENZENE	0.4	U	U	0.1	0.4	UG/L	
	BROMOBENZENE	0.3	U	U	0.09	0.3	UG/L	
	BROMOCHLOROMETHANE	0.4	U	U	0.18	0.4	UG/L	
	BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L	
	BROMOFORM	1.2	U	U	0.18	1.2	UG/L	
	BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	CCVMissi
	CARBON TETRACHLORIDE	2.1	U	U	0.16	2.1	UG/L	
	CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	
	CHLOROETHANE	1	R	U	0.3	1	UG/L	CCVMissi
	CHLOROFORM	0.3	U	U	0.15	0.3	UG/L	
	CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	CCVMissi

6521302

9712254 SW8260A

Page 6 of 9

CIS-1,2-DICHLOROETHENE	1.2	U	U	0.08	1.2	UG/L	
CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L	
DIBROMOCHLOROMETHANE	0.5	U	U	0.16	0.5	UG/L	
DIBROMOFLUOROMETHANE	110			0.1	0.1	ERCEN	
DIBROMOMETHANE	2.4	U	U	0.2	2.4	UG/L	
DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L	CCVMissi
ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L	
HEXAChLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L	
ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L	
M,P-XYLENE	1.3	U	U	0.22	1.3	UG/L	
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	SSCCV%
N-BUTYLBENZENE	1.1	U	U	0.11	1.1	UG/L	
N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L	
NAPHTHALENE	0.4	U	U	0.12	0.4	UG/L	
O-XYLENE	1.1	U	U	0.13	1.1	UG/L	
P-ISOPROPYLtolUENE	1.2	U	U	0.09	1.2	UG/L	
SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L	
STYRENE	0.4	U	U	0.12	0.4	UG/L	
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L	
TETRACHLOROETHENE	1.4	U	U	0.17	1.4	UG/L	
TOLUENE	1.1	U	U	0.14	1.1	UG/L	
TOLUENE-D8	112			0.1	0.1	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.6	U	U	0.09	0.6	UG/L	
TRANS-1,3-DICHLOROPROPENE	1	U	U	0.17	1	UG/L	
TRICHLOROETHENE	1	U	U	0.1	1	UG/L	
TRICHLOROFUOROMETHANE	0.8	R	U	0.22	0.8	UG/L	CCVMissi
VINYL CHLORIDE	11	R	U	0.16	11	UG/L	CCVMissi

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA059	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.148	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	—	U	0.13	—0.8—	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	U	U	0.16	1	UG/L	
	1,1-DICHLOROETHANE	0.4	U	U	0.11	0.4	UG/L	
	1,1-DICHLOROETHENE	1.2	U	U	0.15	1.2	UG/L	
	1,1-DICHLOROPROPENE	1	U	U	0.14	1	UG/L	
	1,2,3-TRICHLOROBENZENE	0.3	U	U	0.15	0.3	UG/L	
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	U	U	0.13	0.4	UG/L	
	1,2,4-TRIMETHYLBENZENE	1.3	U	U	0.09	1.3	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	2.6	U	U	0.25	2.6	UG/L	
	1,2-DIBROMOETHANE	0.6	U	U	0.19	0.6	UG/L	
	1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
	1,2-DICHLOROETHANE	0.6	U	U	0.33	0.6	UG/L	
	1,2-DICHLOROPROPANE	0.4	U	U	0.09	0.4	UG/L	
	1,3,5-TRIMETHYLBENZENE	0.5	U	U	0.1	0.5	UG/L	
	1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
	1,3-DICHLOROPROPANE	0.4	U	U	0.15	0.4	UG/L	
	1,4-DICHLOROBENZENE	0.3	U	U	0.12	0.3	UG/L	
	1-CHLOROHEXANE	0.5	R	U	0.14	0.5	UG/L	CCVMissi
	2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L	
	2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	
	4-BROMOFUOROBENZENE	108			0.1	0.1	ERCEN	
	4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L	

BENZENE	0.4	U	U	0.1	0.4	UG/L	
BROMOBENZENE	0.3	U	U	0.09	0.3	UG/L	
BROMOCHLOROMETHANE	0.4	U	U	0.18	0.4	UG/L	
BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L	
BROMOFORM	1.2	U	U	0.18	1.2	UG/L	
BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	CCVMissi
CARBON TETRACHLORIDE	2.1	U	U	0.16	2.1	UG/L	
CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	
CHLOROETHANE	1	R	U	0.3	1	UG/L	CCVMissi
CHLOROFORM	0.3	U	U	0.15	0.3	UG/L	
CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	CCVMissi
CIS-1,2-DICHLOROETHENE	1.2	U	U	0.08	1.2	UG/L	
CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L	
DIBROMOCHLOROMETHANE	0.5	U	U	0.16	0.5	UG/L	
DIBROMOFLUOROMETHANE	1.6	—	—	0.1	0.1	ERCEN	
DIBROMOMETHANE	2.4	U	U	0.2	2.4	UG/L	
DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L	CCVMissi
ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L	
HEXACHLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L	
ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L	
M,P-XYLENE	1.3	U	U	0.22	1.3	UG/L	
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	IC%RSI
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	SSCCV%
N-BUTYLBENZENE	1.1	U	U	0.11	1.1	UG/L	
N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L	
NAPHTHALENE	0.4	U	U	0.12	0.4	UG/L	
O-XYLENE	1.1	U	U	0.13	1.1	UG/L	
P-ISOPROPYLtolUENE	1.2	U	U	0.09	1.2	UG/L	
SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L	
STYRENE	0.4	U	U	0.12	0.4	UG/L	
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L	
TETRACHLOROETHENE	1.4	U	U	0.17	1.4	UG/L	
TOLUENE	1.1	U	U	0.14	1.1	UG/L	
TOLUENE-D8	107	—	—	0.1	0.1	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.6	U	U	0.09	0.6	UG/L	
TRANS-1,3-DICHLOROPROPENE	1	U	U	0.17	1	UG/L	
TRICHLOROETHENE	1	U	U	0.1	1	UG/L	
TRICHLOROFLUOROMETHANE	0.8	R	U	0.22	0.8	UG/L	CCVMissi
VINYL CHLORIDE	1.1	R	U	0.16	1.1	UG/L	CCVMissi

6521304

9712254 SW8260A

Page 8 of 9

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D critera
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery critera exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference critera exceeded
CVES	Calibration verification ending standard exceeded %D critera
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD critera
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL critera
IS>UCL	Internal standard response exceeded UCL critera
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside critera
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD critera exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery critera exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD critera exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds critera
Sur%R	Surrogate recovery exceeds critera

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

NAS FW JRB AOC 2**Data Quality Evaluation****CH2MHILL****SDG 9712254****Method SW6010A**

Reviewer nh

Date 4/15/98

Matrix water

Senior Review Vito D'Aurora

Field Samples

All analytes with the exception of Lead reported detects.

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
-----------------	------------------	-----------------	------------------	-----------------	------------------

Water

AHA056EB1	EB	AHA057	N	AHA058	N
AHA059	N	LCSWD	BD		

**1. Case Narrative—
Items of Interest**

1. The method blanks results were < the PQL.
2. Initial and CCBs were < the PQL.

2. Blank Summary

Field Blanks Iron was detected between the MDL and RL, but there was no effect on the samples.

Method Blanks The method blanks results were < the PQL.

<u>Blank Type</u>	<u>Blank ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Report Limit</u>	<u>Lab Flag</u>	<u>Units</u>
LB	PBW	IRON	12.46	8	F	UG/L
EB	AHA056EB1	IRON	8.4	8	F	UG/L

3. Spikes and Duplicates

Field Duplicates None in this SDG.

6521307

9712254 SW6010A

Page 2 of 6

Laboratory Duplicates None

Matrix Spike None in this SDG.

4. Laboratory Control Sample All criteria were met.

5. Surrogates NA

6. Tuning and Mass
Calibration NA

7. Internal Standard NA

8. Calibration Information

Initial Calibration Initial and CCBs were < the PQL. The ICAL met the 0.995 criteria for linear regression.

Continuing Calibration CCBs were < the PQL and the CCVs were within 10% of expected value.

9. Holding Time Holding times were met.

10. Summary

General Comments All criteria were met. No flagging needed.

Data Package Completeness 1. Requested gen chem and metals pages on 3/31/98 missing in the packages. Deb will fax ASAP. Received Fed-X on 4/8/98 after going to the

incorrect address.

2. Metals analysis were reported to the IDL and not the MDL. The RL and MDL values were identical as listed in the Edata.

Forms Review/ Items of Interest

All analytes with the exception of Lead reported detects.

COC Review Complete

6521309
9712254 SW6010A

Page 4 of 6

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA057	ALUMINUM	658			44.2	44.2	UG/L	
	CALCIUM	96300			104	104	UG/L	
	IRON	2090			8	8	UG/L	
	LEAD	31.2	U	U	31.2	31.2	UG/L	
	MAGNESIUM	8700			95.4	95.4	UG/L	
	POTASSIUM	4000	F	F	69.9	69.9	UG/L	
	SODIUM	40600			60.5	60.5	UG/L	
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA058	ALUMINUM	81.8	F	F	44.2	44.2	UG/L	
	CALCIUM	120000			104	104	UG/L	
	IRON	244			8	8	UG/L	
	LEAD	31.2	U	U	31.2	31.2	UG/L	
	MAGNESIUM	7200			95.4	95.4	UG/L	
	POTASSIUM	740	F	F	69.9	69.9	UG/L	
	SODIUM	51200			60.5	60.5	UG/L	
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA059	ALUMINUM	170	F	F	44.2	44.2	UG/L	
	CALCIUM	136000			104	104	UG/L	
	IRON	422			8	8	UG/L	
	LEAD	31.2	U	U	31.2	31.2	UG/L	
	MAGNESIUM	11200			95.4	95.4	UG/L	
	POTASSIUM	3320	F	F	69.9	69.9	UG/L	
	SODIUM	43200			60.5	60.5	UG/L	

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
iCSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlocal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriate flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

6521311

9712254 SW6010A

Page 6 of 6

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL.
TB>RL	Trip blank concentration greater than the RL.
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

6521312



CH2MHILL

NAS FW JRB AOC 2

Data Quality Evaluation

SDG 9712254

Method E310.1

Reviewer nh

Date 4/15/98

Matrix water

Senior Review Vito D'Aurora

Field Samples High hits reported > the RL.

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
-----------------	------------------	-----------------	------------------	-----------------	------------------

Water

AHA056EB1

EB

AHA057

N

AHA059

N

AHA058

N

1. Case Narrative
- Items of Interest Nothing to note. Screening method.

2. Blank Summary

Field Blanks Alkalinity not detected > the RL.

Method Blanks Alkalinity not detected > the RL.

3. Spikes and Duplicates

Field Duplicates None in this SDG.

Laboratory Duplicates In-house criteria met.

Matrix Spike None.

6521313

9712254 E310.1

Page 2 of 6

4. Laboratory Control Sample In-house acceptance criteria met.

5. Surrogates Not applicable.

6. Tuning and Mass Calibration Not applicable.

7. Internal Standard Not applicable.

8. Calibration Information

Initial Calibration Not in package.

Continuing Calibration Not in package.

9. Holding Time Holding times were met.

10. Summary

General Comments 1. Screening method. Reviewed data to the in-house acceptance criteria. Flagged the data with an S and SU.

Data Package Completeness Screening method. Reviewed data to the in-house acceptance criteria.

Forms Review/ Items of Interest High hits reported > the RL. Screening method.

6521314

9712254 E310.1

Page 3 of 6

COC Review Complete

6521315

9712254 E310.1

Page 4 of 6

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA057	TOTAL ALKALINITY	275.5	S	-	50	50	MG/L	screen
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA058	TOTAL ALKALINITY	350	S	-	50	50	MG/L	screen
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA059	TOTAL ALKALINITY	370	S	-	50	50	MG/L	screen

Validation Flag Abbreviations

Abbreviation	Validation Reason
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not requested
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrx	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Tri p blank
TB<RL	Tri p blank concentration less than RL
TB>RL	Tri p blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

NAS FW JRB AOC 2**Data Quality Evaluation****SDG** 9712254**Method** SW9056**Reviewer** nh**Date** 4/15/98**Matrix** water

Senior Review Vito D'Aurora

Field Samples

All analytes with the exception of Nitrite and Orthophosphate reported detects. Chloride and Sulfate were diluted 10 and 20 fold on the field samples.

<u>Field ID</u>	<u>QAOC Type</u>	<u>Field ID</u>	<u>QAOC Type</u>	<u>Field ID</u>	<u>QAOC Type</u>
------------------------	-------------------------	------------------------	-------------------------	------------------------	-------------------------

Water

AHA056EB1	EB
AHA059	N

AHA057	N
--------	---

AHA058	N
--------	---

**1. Case Narrative
Items of Interest**

1. The MSD recovery for Orthophosphate exceeded acceptance limits due to matrix effect.

2. Blank Summary

Field Blanks Analytes not detected > the RL.

Method Blanks No analytes detected > RL.

3. Spikes and Duplicates

Field Duplicates None in this SDG.

Laboratory Duplicates None

Matrix Spike 1. The MSD recovery for Orthophosphate exceeded acceptance limits due to matrix effect. The samples were all non-detects, no flagging required.

4. Laboratory Control Sample All criteria were met.

5. Surrogates Not applicable.

6. Tuning and Mass Calibration Not applicable.

7. Internal Standard Not applicable.

8. Calibration Information

Initial Calibration Internal criteria met. No correlation coefficient found to validate.

Continuing Calibration All analytes within 10% of expected value.

9. Holding Time Holding times were met.

10. Summary

General Comments All criteria were met. No flagging needed.

Data Package Completeness 1. In-house criteria used for calibrations.

Forms Review/ Items of Interest All analytes with the exception of Nitrite and Orthophosphate reported detects. Chloride and Sulfate were diluted 10 and 20 fold on the field samples.

COC Review Complete.

6521321

9712254 SW9056

Page 4 of 6

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA057	BROMIDE	0.32			0.1	0.1	MG/L	
	CHLORIDE	39			4	4	MG/L	
	FLUORIDE	0.72			0.2	0.2	MG/L	
	NITRATE	0.96	U	U	0.1	0.1	MG/L	
	NITRITE	0.4	U	U	0.4	0.4	MG/L	
	ORTHOPHOSPHATE	0.1	U	U	0.1	0.1	MG/L	
	SULFATE	29.6			0.2	0.2	MG/L	
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA058	BROMIDE	0.7			0.1	0.1	MG/L	
	CHLORIDE	34			4	4	MG/L	
	FLUORIDE	0.6			0.2	0.2	MG/L	
	NITRATE	1			0.1	0.1	MG/L	
	NITRITE	0.4	U	U	0.4	0.4	MG/L	
	ORTHOPHOSPHATE	0.1	U	U	0.1	0.1	MG/L	
	SULFATE	27.7			0.2	0.2	MG/L	
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA059	BROMIDE	0.4			0.1	0.1	MG/L	
	CHLORIDE	19			2	2	MG/L	
	FLUORIDE	0.4			0.2	0.2	MG/L	
	NITRATE	1.4			0.1	0.1	MG/L	
	NITRITE	0.4	U	U	0.4	0.4	MG/L	
	ORTHOPHOSPHATE	0.1	U	U	0.1	0.1	MG/L	
	SULFATE	89			2	2	MG/L	

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used, another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlocal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

6521323

9712254 SW9056

Page 6 of 6

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

CONFIDENTIAL 6521324

NAS FW JRB AOC 2

Data Quality Evaluation



CH2MHILL

SDG 9802049

Method SW9060

Reviewer nh

Date 4/15/98

Matrix soil

Senior Review Vito D'Aurora

Field Samples

All analyses had detects > the RL except for sample AHA015.

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
Soil					
AHA015	N	AHA028	N	AHA029	N
AHA030	N	AHA033	N	AHA039	N
AHA039MS1	MS	AHA039SD1	SD	AHA040FD1	FD

1. Case Narrative

Items of Interest

AHA033 - No items to note.
AHA028, 029, 030 - No items to note.
AHA039, 040FD1 - No items to note.
AHA015 - No items to note.

2. Blank Summary

Field Blanks AHA033-The EB reported a detect > the RL. The associated sample was > the calculated value, so no flagging needed.
AHA028, 029, 030-The EB was not > the RL.
AHA039 and AHA040FD1-The EB was not > the RL.
AHA015-The EB was not > the RL.

Method Blanks TOC not detected > the RL.

3. Spikes and Duplicates

6521325

9802049 SW9060

Page 2 of 6

Field Duplicates Not detected > the RL.

Laboratory Duplicates A lab duplicate and replicate were analyzed on AHA039. The RPD criteria were met.

Matrix Spike MS/MSD analyzed on sample AHA039. Criteria were met.

4. Laboratory Control Sample All criteria were met.

5. Surrogates Not applicable.

6. Tuning and Mass Calibration Not applicable.

7. Internal Standard Not applicable.

8. Calibration Information

Initial Calibration All criteria were met.

Continuing Calibration All criteria were met.

9. Holding Time Holding times were met except for AHA015 which was out by 2 days. The sample was flagged UJ.

10. Summary

General Comments Holding times were met except for AHA015 which was out by 2 days. The sample was flagged UJ.

Data Package Completeness 1. The soil TOC analysis will come in another SDG from RECRA Labnet incorporated into a Paragon package.
2. These soil samples go along with the water EB samples from SDGs 9711254, 9711262, 9711317 and 9711193.
3. The LCS % recoveries were not filled in the Edata file for 9711L498 and 499. Filled them in per the hard copy.
4. The RL and MDL values were identical as listed in the Edata.

Forms Review/ Items of Interest All analyses had detects > the RL except for sample AHA015.

COC Review The soil TOC analysis will come in another SDG from RECRA Labnet incorporated into a Paragon package. These soil samples go along with the water EB samples from SDGs 9711254, 9711262, 9711317 and 9711193.

6521327

9802049 SW9060

Page 4 of 6

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA015	TOTAL ORGANIC CARBON	60	UJ	U	60	60	MG/KG	HT>UCI
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA028	TOTAL ORGANIC CARBON	3480			952	952	MG/KG	
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA029	TOTAL ORGANIC CARBON	5150			513	513	MG/KG	
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA030	TOTAL ORGANIC CARBON	2080			1820	1820	MG/KG	
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA033	TOTAL ORGANIC CARBON	1150			408	408	MG/KG	
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA039	TOTAL ORGANIC CARBON	1060			31	31	MG/KG	
Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA040FD1	TOTAL ORGANIC CARBON	63	U	U	63	63	MG/KG	

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LGL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatnx	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

6521329

9802049 SW9060

Page 6 of 6

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

Data Quality Evaluation

SDG 9802130 **Method SW8260A**
Reviewer mhc **Date 5/23/98** **Matrix Water**

Senior Review Vito D'Aurora

Field Samples

Field ID	QAQC Type	Field ID	QAQC Type	Field ID	QAQC Type
-----------------	------------------	-----------------	------------------	-----------------	------------------

Water

AIA001TB1	TB	AIA002EB1	EB	AIA004	N
AIA005	N	AIA006FD1	FD	AIA007	N
AIA008	N	AIA009	N	LABQC	BD

**1. Case Narrative
Items of Interest**

1. Methylene Chloride was detected > the RL in the method blank. This compound was detected < the calculated value in samples 4,5,&7, so the data were flagged U (by the lab). The concentration of Methylene chloride in samples -6 and -8 were above the calculated value and were not U flagged.
2. All LCS/LCD recoveries and RPDs were within acceptance criteria with the exception of Methylene Chloride. The background levels of Methylene chloride detected in this laboratory can cause inconsistent and irreproducible results for low level analyses.
3. MS/MSDs were not performed due to insufficient sample volume.
4. Due to the concentration of target analytes, samples 6 and 8 were analyzed at a higher dilution.
5. All initial calibration criteria were within acceptance criteria. Method SW8260B states any compound exceeding 15% RSD criteria should be analyzed with a higher order curve such as a quadratic. We quantitated these compounds using the average response factor due to a software programming problem associated with Hewlett-Packard MSDs. The manufacturer is now aware of the problem and is working on a solution.

2. Blank Summary

Field Blanks No target analytes detected >RL in either the trip blank or equipment blank.

6521331

9802130 SW8260A

Page 2 of 13

Method Blanks

1. Methylene Chloride was detected > the RL in the method blank. This compound was detected < the calculated value in samples 4,5,&7, so the data were flagged U (by the lab). The concentration of Methylene chloride in samples -6 and -8 were above the calculated value and were not U flagged.

<u>Blank Type</u>	<u>Blank ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Report Limit</u>	<u>LabFlag</u>	<u>Units</u>
LB	LABQC	METHYLENE CHLORIDE	0.75	0.21		UG/L

3. Spikes and Duplicates

Field Duplicates All criteria met.

Laboratory Duplicates None in this SDG.

Matrix Spike MS/MSDs were not performed due to insufficient sample volume.

4. Laboratory Control Sample

The LCS of 2/24/98 exceeded recovery LCL criteria for MeCl. The associated samples detected results have been J flagged and non-detects have been R flagged.

<u>Matrix</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>Analyte</u>	<u>Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
WATER	BD	LABQC	METHYLENE CHLORIDE	58	75	--
WATER	BS	LABQC	METHYLENE CHLORIDE	59	75	125

5. Surrogates

All criteria were met.

6. Tuning and Mass Calibration

All criteria met.

7. Internal Standard

All internal standard recoveries were within acceptance criteria.

8. Calibration Information

Initial Calibration 1. Methylene chloride exceeded the ICAL RSD criteria (2/24/98) and the associated sample results have been R flagged.

6521332

Continuing Calibration

1. Six compounds were missing from the SSCCV from 2/24/98. Two compounds exceeded 25%D. The associated sample results were validated with an R flag.
2. There is no CCV of 2/24/98 and it is assumed that the SSCCV of 2/24/98 was used for both. The associated data is not double flagged for CCV issues already flagged as SSCV issues.

9. Holding Time**Holding times were met.****10. Summary**

- General Comments**
1. Methylene Chloride was detected > the RL in the method blank. This compound was detected < the calculated value in samples 4,5,&7, so the data were flagged U (by the lab). The concentration of Methylene chloride in samples -6 and -8 were above the calculated value and were not U flagged.
 2. The LCS of 2/24/98 exceeded recovery LCL criteria. The associated samples detected results have been J flagged and non-detects have been R flagged.
 3. Methylene chloride exceeded the ICAL RSD criteria (2/24/98) and the associated sample results have been R flagged.
 4. Six compounds were missing from the SSCCV from 2/24/98. Two compounds exceeded 25%D. The associated sample results were validated with an R flag.
 5. There is no CCV of 2/24/98 and it is assumed that the SSCCV of 2/24/98 was used for both. The associated data is not double flagged for CCV issues already flagged as SSCV issues.

Data Package Completeness

1. There are no 1X results for samples requiring dilution.
2. There is no demonstration of a MDL being completed within 1yr.
3. There is no CCV listed on the sequence log.
4. There is no documentation in the case narrative covering the SSCCV and CCV exceedances.
5. There is extraneous edata with results field equal to zero, no lab flags, and concqual is equal. The lot control number is va022498-1 and it has been deleted.
6. Samples 9802130-3,4, and 5 the surrogate field was incorrect for 4-bromofluorobenzene and toluene-d8. The database has been corrected.
7. All requested analyses completed as defined by the COC and any exception reports.

Forms Review/ Items of Interest

Target analytes were only detected in samples AIA007, -008, and -009.

COC Review

All necessary chain of custody procedures were adhered to and the documentation is complete.

652133

9802130 SW8260A

Page 4 of 13

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA004	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.148	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	U	U	0.16	1	UG/L	
	1,1-DICHLOROETHANE	0.4	U	U	0.11	0.4	UG/L	
	1,1-DICHLOROETHENE	1.2	U	U	0.15	1.2	UG/L	
	1,1-DICHLOROPROPENE	1	U	U	0.14	1	UG/L	
	1,2,3-TRICHLOROBENZENE	0.3	U	U	0.15	0.3	UG/L	
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	U	U	0.13	0.4	UG/L	
	1,2,4-TRIMETHYLBENZENE	1.3	U	U	0.09	1.3	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	2.6	U	U	0.25	2.6	UG/L	
	1,2-DIBROMOETHANE	0.6	U	U	—	0.19	0.6	UG/L
	1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
	1,2-DICHLOROETHANE	0.6	U	U	0.33	0.6	UG/L	
	1,2-DICHLOROPROPANE	0.4	U	U	0.09	0.4	UG/L	
	1,3,5-TRIMETHYLBENZENE	0.5	U	U	0.1	0.5	UG/L	
	1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
	1,3-DICHLOROPROPANE	0.4	U	U	0.15	0.4	UG/L	
	1,4-DICHLOROBENZENE	0.3	U	U	0.12	0.3	UG/L	
	1-CHLOROHEXANE	0.5	U	U	0.14	0.5	UG/L	
	2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L	
	2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	
	4-BROMOFLUOROBENZENE	95			0.1	0.1	ERCEN	
	4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L	
	BENZENE	0.4	U	U	0.1	0.4	UG/L	
	BROMOBENZENE	0.3	U	U	0.09	0.3	UG/L	
	BROMOCHLOROMETHANE	0.4	R	U	0.18	0.4	UG/L	SSCCV%
	BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L	
	BROMOFORM	—	U	U	0.18	1.2	UG/L	
	BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	SCVMIS
	CARBON TETRACHLORIDE	2.1	U	U	0.16	2.1	UG/L	
	CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	
	CHLOROETHANE	1	R	U	0.3	1	UG/L	SCVMIS
	CHLOROFORM	0.3	U	U	0.15	0.3	UG/L	
	CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	SCVMIS
	CIS-1,2-DICHLOROETHENE	1.2	U	U	0.08	1.2	UG/L	
	CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L	
	DIBROMOCHLOROMETHANE	0.5	U	U	0.16	0.5	UG/L	
	DIBROMOFLUOROMETHANE	98			0.1	0.1	ERCEN	
	DIBROMOMETHANE	2.4	U	U	0.2	2.4	UG/L	
	DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L	SCVMIS
	ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L	
	HEXAChLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L	
	ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L	
	m,p-xylene	1.3	U	U	0.22	1.3	UG/L	
	METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BS%R

								SSCCV%
								BD%
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L		
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L		
N-BUTYLBENZENE	1.1	U	U	0.11	1.1	UG/L		
N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L		
NAPHTHALENE	0.4	U	U	0.12	0.4	UG/L		
O-XYLENE	1.1	U	U	0.13	1.1	UG/L		
P-ISOPROPYLtolUENE	1.2	U	U	0.09	1.2	UG/L		
SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L		
STYRENE	0.4	U	U	0.12	0.4	UG/L		
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L		
TETRACHLOROETHENE	1.4	U	U	0.17	1.4	UG/L		
TOLUENE	1.1	U	U	0.14	1.1	UG/L		
TOLUENE-D8	102			0.1	0.1	ERCEN		
TRANS-1,2-DICHLOROETHENE	0.6	U	U	0.09	0.6	UG/L		
TRANS-1,3-DICHLOROPROPENE	1	U	U	0.17	1	UG/L		
TRICHLOROETHENE	1	U	U	0.1	1	UG/L		
TRICHLOROFLUOROMETHANE	0.8	R	U	0.22	0.8	UG/L	SCVMIS	
VINYL CHLORIDE	1.1	R	U	0.16	1.1	UG/L	SCVMIS	

Field ID	Analyte	Result.	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA005	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.148	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	U	U	0.16	1	UG/L	
	1,1-DICHLOROETHANE	0.4	U	U	0.11	0.4	UG/L	
	1,1-DICHLOROETHENE	1.2	U	U	0.15	1.2	UG/L	
	1,1-DICHLOROPROPENE	1	U	U	0.14	1	UG/L	
	1,2,3-TRICHLOROBENZENE	0.3	U	U	0.15	0.3	UG/L	
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	U	U	0.13	0.4	UG/L	
	1,2,4-TRIMETHYLBENZENE	1.3	U	U	0.09	1.3	UG/L	
	2-OIBROMO-3-CHLOROPROPANE	2.6	U	U	0.25	2.6	UG/L	
	1,2-DIBROMOETHANE	0.6	U	U	0.19	0.6	UG/L	
	1,2-OICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
	1,2-OICHLOROETHANE	0.6	U	U	0.33	0.6	UG/L	
	1,2-DICHLOROPROPANE	0.4	U	U	0.09	0.4	UG/L	
	1,3,5-TRIMETHYLBENZENE	0.5	U	U	0.1	0.5	UG/L	
	1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
	1,3-DICHLOROPROPANE	0.4	U	U	0.15	0.4	UG/L	
	1,4-DICHLOROBENZENE	0.3	U	U	0.12	0.3	UG/L	
	1-CHLOROHEXANE	0.5	U	U	0.14	0.5	UG/L	
	2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L	
	2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	
	4-BROMOFLUOROBENZENE	97			0.1	0.1	ERCEN	
	4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L	
	BENZENE	0.4	U	U	0.1	0.4	UG/L	
	BROMOBENZENE	0.3	U	U	0.09	0.3	UG/L	
	BROMOCHLOROMETHANE	0.4	R	U	0.18	0.4	UG/L	SSCCV%
	BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L	
	BROMOFORM	1.2	U	U	0.18	1.2	UG/L	
	BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	SCVMIS
	CARBON TETRACHLORIDE	2.1	U	U	0.16	2.1	UG/L	
	CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	
	CHLOROETHANE	1	R	U	0.3	1	UG/L	SCVMIS
	CHLOROFORM	0.3	U	U	0.15	0.3	UG/L	

6521335

9802130 SW8260A

Page 6 of 13

CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	SCVMIS
CIS-1,2-DICHLOROETHENE	1.2	U	U	0.08	1.2	UG/L	
CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L	
DIBROMOCHLOROMETHANE	0.5	U	U	0.16	0.5	UG/L	
DIBROMOFLUOROMETHANE	97			0.1	0.1	ERCEN	
DIBROMOMETHANE	2.4	U	U	0.2	2.4	UG/L	
DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L	SCVMIS
ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L	
HEXACHLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L	
ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L	
m,p-xylene	1.3	U	U	0.22	1.3	UG/L	
METHYLENE CHLORIDE	0.74	R	U	0.21	0.3	UG/L	BD%R
METHYLENE CHLORIDE	0.74	R	U	0.21	0.3	UG/L	BS%R
METHYLENE CHLORIDE	0.74	R	U	0.21	0.3	UG/L	SSCCV%
N-BUTYLBENZENE	1.1	U	U	0.11	1.1	UG/L	
N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L	
NAPHTHALENE	0.4	U	U	0.12	0.4	UG/L	
O-XYLENE	1.1	U	U	0.13	1.1	UG/L	
P-ISOPROPYLtolUENE	1.2	U	U	0.09	1.2	UG/L	
SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L	
STYRENE	0.4	U	U	0.12	0.4	UG/L	
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L	
TETRACHLOROETHENE	1.4	U	U	0.17	1.4	UG/L	
TOLUENE	1.1	U	U	0.14	1.1	UG/L	
TOLUENE-D8	98			0.1	0.1	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.6	U	U	0.09	0.6	UG/L	
TRANS-1,3-DICHLOROPROPENE	1	U	U	0.17	1	UG/L	
TRICHLOROETHENE	1	U	U	0.1	1	UG/L	
TRICHLOROFUOROMETHANE	0.8	R	U	0.22	0.8	UG/L	SCVMIS
VINYL CHLORIDE	1.1	R	U	0.16	1.1	UG/L	SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	-MDL	RL	Units	Validation Reason
AIA006FD1	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.148	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	U	U	0.16	1	UG/L	
	1,1-DICHLOROETHANE	0.4	U	U	0.11	0.4	UG/L	
	1,1-DICHLOROETHENE	1.2	U	U	0.15	1.2	UG/L	
	1,1-DICHLOROPROPENE	1	U	U	0.14	1	UG/L	
	1,2,3-TRICHLOROBENZENE	0.3	U	U	0.15	0.3	UG/L	
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	U	U	0.13	0.4	UG/L	
	1,2,4-TRIMETHYLBENZENE	1.3	U	U	0.09	1.3	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	2.6	U	U	0.25	2.6	UG/L	
	1,2-DIBROMOETHANE	0.6	U	U	0.19	0.6	UG/L	
	1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
	1,2-DICHLOROETHANE	0.6	U	U	0.33	0.6	UG/L	
	1,2-DICHLOROPROPANE	0.4	U	U	0.09	0.4	UG/L	
	1,3,5-TRIMETHYLBENZENE	0.5	U	U	0.1	0.5	UG/L	
	1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
	1,3-DICHLOROPROPANE	0.4	U	U	0.15	0.4	UG/L	
	1,4-DICHLOROBENZENE	0.3	U	U	0.12	0.3	UG/L	
	1-CHLOROHEXANE	0.5	U	U	0.14	0.5	UG/L	
	2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L	
	2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	

4-BROMOFLUOROBENZENE	96			0.1	0.1	ERCEN	
4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L	
BENZENE	0.4	U	U	0.1	0.4	UG/L	
BROMOBENZENE	0.3	U	U	0.09	0.3	UG/L	
BROMOCHLOROMETHANE	0.4	R	U	0.18	0.4	UG/L	SSCCV%
BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L	
BROMOFORM	1.2	U	U	0.18	1.2	UG/L	
BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	SCVMIS
CARBON TETRACHLORIDE	2.1	U	U	0.16	2.1	UG/L	
CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	
CHLOROETHANE	1	R	U	0.3	1	UG/L	SCVMIS
CHLOROFORM	0.3	U	U	0.15	0.3	UG/L	
CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	SCVMIS
CIS-1,2-DICHLOROETHENE	1.2	U	U	0.08	1.2	UG/L	
CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L	
DIBROMOCHLOROMETHANE	0.5	U	U	0.16	0.5	UG/L	
DIBROMOFLUOROMETHANE	95			0.1	0.1	ERCEN	
DIBROMOMETHANE	2.4	U	U	0.2	2.4	UG/L	
DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L	SCVMIS
ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L	
HEXACHLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L	
ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L	
m,p-xylene	1.3	U	U	0.22	1.3	UG/L	
METHYLENE CHLORIDE	0.97	R	U	0.21	0.3	UG/L	BD%R
METHYLENE CHLORIDE	0.97	R	U	0.21	0.3	UG/L	BS%R
METHYLENE CHLORIDE	0.97	R	U	0.21	0.3	UG/L	SSCCV%
N-BUTYLBENZENE	1.1	U	U	0.11	1.1	UG/L	
N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L	
NAPHTHALENE	0.4	U	U	0.12	0.4	UG/L	
O-XYLENE	1.1	U	U	0.13	1.1	UG/L	
P-ISOPROPYLtolUENE	1.2	U	U	0.09	1.2	UG/L	
SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L	
STYRENE	0.4	U	U	0.12	0.4	UG/L	
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L	
TETRACHLOROETHENE	1.4	U	U	0.17	1.4	UG/L	
TOLUENE	1.1	U	U	0.14	1.1	UG/L	
TOLUENE-D8	101			0.1	0.1	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.6	U	U	0.09	0.6	UG/L	
TRANS-1,3-DICHLOROPROPENE	1	U	U	0.17	1	UG/L	
TRICHLOROETHENE	1	U	U	0.1	1	UG/L	
TRICHLOROFLUOROMETHANE	0.8	R	U	0.22	0.8	UG/L	SCVMIS
VINYL CHLORIDE	1.1	R	U	0.16	1.1	UG/L	SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA007	1,1,1,2-TETRACHLOROETHANE	5	U	U	1.48	5	UG/L	
	1,1,1-TRICHLOROETHANE	8	U	U	1.3	8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	4	U	U	1.7	4	UG/L	
	1,1,2-TRICHLOROETHANE	10	U	U	1.6	10	UG/L	
	1,1-DICHLOROETHANE	4	U	U	1.1	4	UG/L	
	1,1-DICHLOROETHENE	12	U	U	1.5	12	UG/L	
	1,1-DICHLOROPROPENE	10	U	U	1.4	10	UG/L	
	1,2,3-TRICHLOROBENZENE	3	U	U	1.5	3	UG/L	
	1,2,3-TRICHLOROPROPANE	32	U	U	1.5	32	UG/L	
	1,2,4-TRICHLOROBENZENE	4	U	U	1.3	4	UG/L	
	1,2,4-TRIMETHYLBENZENE	13	U	U	0.9	13	UG/L	

6521337

9802130 SW8260A

Page 8 of 13

2-DIBROMO-3-CHLOROPROPAN	26	U	U	2.5	26	UG/L
1,2-DIBROMOETHANE	6	U	U	19	6	UG/L
1,2-DICHLOROBENZENE	3	U	U	1	3	UG/L
1,2-DICHLOROETHANE	6	U	U	33	6	UG/L
1,2-DICHLOROPROPANE	4	U	U	0.9	4	UG/L
1,3,5-TRIMETHYLBENZENE	5	U	U	1	5	UG/L
1,3-DICHLOROBENZENE	12	U	U	0.5	12	UG/L
1,3-DICHLOROPROPANE	4	U	U	15	4	UG/L
1,4-DICHLOROBENZENE	3	U	U	12	3	UG/L
1-CHLOROHEXANE	5	U	U	14	5	UG/L
2,2-DICHLOROPROPANE	35	U	U	32	35	UG/L
2-CHLOROTOLUENE	4	U	U	1	4	UG/L
4-BROMOFLUOROBENZENE	99			1	1	ERCEN
4-CHLOROTOLUENE	6	U	U	0.8	6	UG/L
BENZENE	4	U	U	1	4	UG/L
BROMOBENZENE	3	U	U	0.9	3	UG/L
BROMOCHLOROMETHANE	4	R	U	18	4	UG/L
BROMODICHLOROMETHANE	8	U	U	1	8	UG/L
BROMOFORM	12	U	U	18	12	UG/L
BROMOMETHANE	11	R	U	2	11	UG/L
CARBON TETRACHLORIDE	21	U	U	16	21	UG/L
CHLOROBENZENE	4	U	U	12	4	UG/L
CHLOROETHANE	10	R	U	3	10	UG/L
CHLOROFORM	3	U	U	15	3	UG/L
CHLOROMETHANE	13	R	U	0.9	13	UG/L
CIS-1,2-DICHLOROETHENE	35			0.8	12	UG/L
CIS-1,3-DICHLOROPROPENE	10	U	U	11	10	UG/L
DIBROMOCHLOROMETHANE	5	U	U	16	5	UG/L
DIBROMOFLUOROMETHANE	105			1	1	ERCEN
DIBROMOMETHANE	24	U	U	2	24	UG/L
DICHLORODIFLUOROMETHANI	10	R	U	3.6	10	UG/L
ETHYLBENZENE	6	U	U	12	6	UG/L
HEXAChLOROBUTADIENE	11	U	U	2	11	UG/L
ISOPROPYLBENZENE	5	U	U	1.3	5	UG/L
m,p-xylene	13	U	U	2.2	13	UG/L
METHYLENE CHLORIDE	43	R	U	2.1	3	UG/L
N-BUTYLBENZENE	11	U	U	1.1	11	UG/L
N-PROPYLBENZENE	4	U	U	0.9	4	UG/L
NAPHTHALENE	4	U	U	1.2	4	UG/L
O-XYLENE	11	U	U	1.3	11	UG/L
P-ISOPROPYLTOLUENE	12	U	U	0.9	12	UG/L
SEC-BUTYLBENZENE	13	U	U	1.2	13	UG/L
STYRENE	4	U	U	1.2	4	UG/L
TERT-BUTYLBENZENE	14	U	U	1.3	14	UG/L
TETRACHLOROETHENE	14	U	U	1.7	14	UG/L
TOLUENE	11	U	U	1.4	11	UG/L
TOLUENE-D8	98			1	1	ERCEN
TRANS-1,2-DICHLOROETHENE	23			0.9	6	UG/L
TRANS-1,3-DICHLOROPROPENE	10	U	U	1.7	10	UG/L
TRICHLOROETHENE	180			1	10	UG/L
TRICHLOROFLUOROMETHANE	8	R	U	2.2	8	UG/L
VINYLCHLORIDE	11	R	U	1.6	11	UG/L

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA008	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.148	0.5	UG/L	SCVMIS

6521338

1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L
1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L
1,1,2-TRICHLOROETHANE	1	U	U	0.16	1	UG/L
1,1-DICHLOROETHANE	0.4	U	U	0.11	0.4	UG/L
1,1-DICHLOROPROPENE	1.2	U	U	0.15	1.2	UG/L
1,1-DICHLOROPROPENE	1	U	U	0.14	1	UG/L
1,2,3-TRICHLOROBENZENE	0.3	U	U	0.15	0.3	UG/L
1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L
1,2,4-TRICHLOROBENZENE	0.4	U	U	0.13	0.4	UG/L
1,2,4-TRIMETHYLBENZENE	1.3	U	U	0.09	1.3	UG/L
2-DIBROMO-3-CHLOROPROPANE	2.6	U	U	0.25	2.6	UG/L
1,2-DIBROMOETHANE	0.6	U	U	0.19	0.6	UG/L
1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L
1,2-DICHLOROETHANE	0.6	U	U	0.33	0.6	UG/L
1,2-DICHLOROPROPANE	0.4	U	U	0.09	0.4	UG/L
1,3,5-TRIMETHYLBENZENE	0.5	U	U	0.1	0.5	UG/L
1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L
1,3-DICHLOROPROPANE	0.4	U	U	0.15	0.4	UG/L
1,4-DICHLOROBENZENE	0.3	U	U	0.12	0.3	UG/L
1-CHLOROHEXANE	0.5	U	U	0.14	0.5	UG/L
2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L
2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L
4-BROMOFLUOROBENZENE	103			0.1	0.1	ERCEN
4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L
BENZENE	0.4	U	U	0.1	0.4	UG/L
BROMOBENZENE	0.3	U	U	0.09	0.3	UG/L
BROMOCHLOROMETHANE	0.4	R	U	0.18	0.4	UG/L
BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L
BROMOFORM	1.2	U	U	0.18	1.2	UG/L
BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L
CARBON TETRACHLORIDE	2.1	U	U	0.16	2.1	UG/L
CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L
CHLOROETHANE	1	R	U	0.3	1	UG/L
CHLOROFORM	0.3	U	U	0.15	0.3	UG/L
CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L
CIS-1,2-DICHLOROETHENE	0.82	F	F	0.08	1.2	UG/L
CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L
DIBROMOCHLOROMETHANE	0.5	U	U	0.16	0.5	UG/L
DIBROMOFLUOROMETHANE	99			0.1	0.1	ERCEN
DIBROMOMETHANE	2.4	U	U	0.2	2.4	UG/L
DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L
ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L
HEXACHLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L
ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L
m,p-xylene	1.3	U	U	0.22	1.3	UG/L
METHYLENE CHLORIDE	0.71	R	U	0.21	0.3	UG/L
METHYLENE CHLORIDE	0.71	R	U	0.21	0.3	UG/L
METHYLENE CHLORIDE	0.71	R	U	0.21	0.3	UG/L
N-BUTYLBENZENE	0.41	F	F	0.11	1.1	UG/L
N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L
NAPHTHALENE	0.4	U	U	0.12	0.4	UG/L
O-XYLENE	1.1	U	U	0.13	1.1	UG/L
P-ISOPROPYLtolUENE	1.2	U	U	0.09	1.2	UG/L
SEC-BUTYLBENZENE	0.45	F	F	0.12	1.3	UG/L
STYRENE	0.4	U	U	0.12	0.4	UG/L
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L

6521339

9802130 SW8260A

Page 10 of 13

TETRACHLOROETHENE	14	U	U	0.17	14	UG/L	
TOLUENE	11	U	U	0.14	11	UG/L	
TOLUENE-D8	102			0.1	0.1	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.84			0.09	0.6	UG/L	
TRANS-1,3-DICHLOROPROPENE	1	U	U	0.17	1	UG/L	
TRICHLOROETHENE	1	U	U	0.1	1	UG/L	
TRICHLOROFLUOROMETHANE	0.8	R	U	0.22	0.8	UG/L	SCVMIS
VINYL CHLORIDE	1.1	R	U	0.16	11	UG/L	SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA009	1,1,1,2-TETRACHLOROETHANE	10	U	U	2.96	10	UG/L	
	1,1,1-TRICHLOROETHANE	16	U	U	2.6	16	UG/L	
	1,1,2,2-TETRACHLOROETHANE	8	U	U	3.4	8	UG/L	
	1,1,2-TRICHLOROETHANE	20	U	U	3.2	20	UG/L	
	1,1-DICHLOROETHANE	8	U	U	2.2	8	UG/L	
	1,1-DICHLOROETHENE	24	U	U	3	24	UG/L	
	1,1-DICHLOROPROPENE	20	U	U	2.8	20	UG/L	
	1,2,3-TRICHLOROBENZENE	6	U	U	3	6	UG/L	
	1,2,3-TRICHLOROPROPANE	64	U	U	3	64	UG/L	
	1,2,4-TRICHLOROBENZENE	8	U	U	2.6	8	UG/L	
	1,2,4-TRIMETHYLBENZENE	26	U	U	1.8	26	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	52	U	U	5	52	UG/L	
	1,2-DIBROMOETHANE	12	U	U	3.8	12	UG/L	
	1,2-DICHLOROBENZENE	6	U	U	2	6	UG/L	
	1,2-DICHLOROETHANE	12	U	U	6.6	12	UG/L	
	1,2-DICHLOROPROPANE	8	U	U	1.8	8	UG/L	
	1,3,5-TRIMETHYLBENZENE	10	U	U	2	10	UG/L	
	1,3-DICHLOROBENZENE	24	U	U	1	24	UG/L	
	1,3-DICHLOROPROPANE	8	U	U	3	8	UG/L	
	1,4-DICHLOROBENZENE	6	U	U	2.4	6	UG/L	
	1-CHLOROHEXANE	10	U	U	2.8	10	UG/L	
-	2,2-DICHLOROPROPANE	70	U	U	6.4	70	UG/L	
	2-CHLOROTOLUENE	8	U	U	2	8	UG/L	
	4-BROMOFLUOROBENZENE	102			2	2	ERCEN	
	4-CHLOROTOLUENE	12	U	U	1.6	12	UG/L	
	BENZENE	8	U	U	2	8	UG/L	
	BROMOBENZENE	6	U	U	1.8	6	UG/L	
	BROMOCHLOROMETHANE	8	R	U	3.6	8	UG/L	SSCCV%
	BROMODICHLOROMETHANE	16	U	U	2	16	UG/L	
	BROMOFORM	24	U	U	3.6	24	UG/L	
	BROMOMETHANE	22	R	U	4	22	UG/L	SCVMIS
	CARBON TETRACHLORIDE	42	U	U	3.2	42	UG/L	
	CHLOROBENZENE	8	U	U	2.4	8	UG/L	
	CHLOROETHANE	20	R	U	6	20	UG/L	SCVMIS
	CHLOROFORM	6	U	U	3	6	UG/L	
	CHLOROMETHANE	26	R	U	1.8	26	UG/L	SCVMIS
	CIS-1,2-DICHLOROETHENE	160			1.6	24	UG/L	
	CIS-1,3-DICHLOROPROPENE	20	U	U	2.2	20	UG/L	
	DIBROMOCHLOROMETHANE	10	U	U	3.2	10	UG/L	
	DIBROMOFLUOROMETHANE	104			2	2	ERCEN	
	DIBROMOMETHANE	48	U	U	4	48	UG/L	
	DICHLORODIFLUOROMETHANE	20	R	U	7.2	20	UG/L	SCVMIS
	ETHYLBENZENE	12	U	U	2.4	12	UG/L	
	HEXAChLOROBUTADIENE	22	U	U	4	22	UG/L	
	ISOPROPYLBENZENE	10	U	U	2.6	10	UG/L	

6521340

m,p-xylene	26	U	U	44	26	UG/L	
METHYLENE CHLORIDE	86	R	U	42	6	UG/L	SSCCV%
N-BUTYLBENZENE	22	U	U	22	22	UG/L	
N-PROPYLBENZENE	8	U	U	18	8	UG/L	
NAPHTHALENE	8	U	U	24	8	UG/L	
O-XYLENE	22	U	U	26	22	UG/L	
P-ISOPROPYLTOLUENE	24	U	U	18	24	UG/L	
SEC-BUTYLBENZENE	26	U	U	24	26	UG/L	
STYRENE	8	U	U	24	8	UG/L	
TERT-BUTYLBENZENE	28	U	U	26	28	UG/L	
TETRACHLOROETHENE	28	U	U	34	28	UG/L	
TOLUENE	22	U	U	2.8	22	UG/L	
TOLUENE-D8	104			2	2	ERCEN	
TRANS-1,2-DICHLOROETHENE	28			1.8	12	UG/L	
TRANS-1,3-DICHLOROPROPENE	20	U	U	34	20	UG/L	
TRICHLOROETHENE	410			2	20	UG/L	
TRICHLOROFLUOROMETHANE	16	R	U	4.4	16	UG/L	SCVMIS
VINYL CHLORIDE	22	R	U	32	22	UG/L	SCVMIS

6521341

9802130 SW8260A

Page 12 of 13

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D critena
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery critena exceeded
BS%R	LCS percent recovery critena exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference critena exceeded
CVES	Calibration verification ending standard exceeded %D critena
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used, another value is appropriate or data was not requested
FD>RPD	Field duplicate exceeds RPD critena
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference critena exceeded
IS<LCL	Internal standard response exceeded \pm LCL critera
IS>UCL	Internal standard response exceeded UCL critena
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside critena
LCSD	LCSD not required No flags applied.
LCSDRPD	LCSD RPD critena exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery critena exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD critena exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds critena
Sur%R	Surrogate recovery exceeds critera

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Tnp blank
TB<RL	Tnp blank concentration less than RL
TB>RL	Tnp blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria
SCVMISS	Missing target analyte

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample

M = A matrix effect was present.

S = To be applied to all field screening data

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

NAS FW JRB AOC 2

6521343



CH2MHILL

Data Quality Evaluation

SDG 9802151 Method SW8260A
Reviewer mhc Date 5/23/98 Matrix Water
Senior Review Vito D'Aurora

Field Samples

Field ID	QAQC Type	Field ID	QAQC Type	Field ID	QAQC Type
----------	-----------	----------	-----------	----------	-----------

Water

AIA003	N	AIA010TB1	TB	AIA011EB1	EB
AIA012AB1	AB	AIA014	N	AIA015	N
AIA016	N	AIA017	N	AIA017DL	N
AIA017MS	MS	AIA017MSD	SD	AIA018FD1	FD
AIA019	N	AIA020	N	AIA021	N
LABQC	BD				

1. Case Narrative Items of Interest

1. Methylene Chloride was detected > the RL in the method blank. This compound was detected < the calculated value in samples 1-4, 6, 7, & 12 so the data were flagged U (by the lab). The concentration of Methylene chloride in samples -5, 8, 9, 10, and -11 were above the calculated value and were not U flagged.
2. All LCS/LCD recoveries and RPDs were within acceptance criteria with the exception of Methylene Chloride. The background levels of Methylene chloride detected in this laboratory can cause inconsistent and irreproducible results for low level analyses.
3. MS/MSDs were within acceptance criteria with the exceptions of Methylene chloride and TCE.
4. Due to the concentration of target analytes, samples 6 and 8 were analyzed at a higher dilution.
5. All initial calibration criteria were within acceptance criteria. Method SW8260B states any compound exceeding 15% RSD criteria should be analyzed with a higher order curve such as a quadratic. We quantitated these compounds using the average response factor due to a software programming problem associated with Hewlett-Packard MSDs. The manufacturer is now aware of the problem and is working on a solution.

2. Blank Summary

6521344

9802151 SW8260A

Page 2 of 18

Field Blanks No target analytes detected >RL in either the trip blank, equipment blank or ambient blank.

Method Blanks Methylene Chloride was detected > the RL in the method blank. This compound was detected < the calculated value in samples 1-4,6,7,&12 so the data were flagged U (by the lab). The concentration of Methylene chloride in samples -5, 8, 9, 10, and -11 were above the calculated value and were not U flagged.

<u>Blank Type</u>	<u>Blank ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Report Limit</u>	<u>LabFlag</u>	<u>Units</u>
LB	LABQC	METHYLENE CHLORIDE	0.75	0.21		UG/L
LB	LABQC	METHYLENE CHLORIDE	1.6	0.21		UG/L

3. Spikes and Duplicates

Field Duplicates All criteria met.

Laboratory Duplicates None in this SDG.

Matrix Spike Methylene chloride exceeded recovery LCL. No flagging has been applied as the results have been rejected for a number of reasons.

4. Laboratory Control Sample

The LCS/LCSD of 2/24/98 exceeded recovery LCL criteria for MeCl. The associated samples detected results have been J flagged and non-detects have been R flagged. For the LCSD 1,3,5-trimethylbenzene exceeded the UCL and there is not mention of this in the case narrative. The associated sample results have been J flagged for detects and none flagged for non-detects.

<u>Matrix</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>Analyte</u>	<u>Recovery</u>	<u>LowerLimit</u>	<u>UpperLimit</u>
WATER	BD	LABQC	1,3,5-TRIMETHYLBENZEN	114	72	112
WATER	BD	LABQC	METHYLENE CHLORIDE	73	75	125
WATER	BS	LABQC	METHYLENE CHLORIDE	70	75	125
WATER	BD	LABQC	METHYLENE CHLORIDE	58	75	125
WATER	BS	LABQC	METHYLENE CHLORIDE	59	75	125

5. Surrogates All criteria were met.

6. Tuning and Mass Calibration All criteria met.

7. Internal Standard

All internal standard recoveries were within acceptance criteria.

8. Calibration Information**Initial Calibration**

1. There is no form 6 for the ICAL 2/23/98 in this package. The form was mistakenly included in package 9802180, this was used to validate this package (9801151).
2. Methylene chloride exceeded the ICAL RSD criteria (2/23/98) and the associated sample results have been R flagged.
3. Methylene chloride exceeded the ICAL RSD criteria (2/24/98) and the associated sample results have been R flagged.

Continuing Calibration

1. The SSCCV for 2/23/98 is missing and can be found in packages 9802180 where it is not required. Five compounds were missing from the SSCCV of 2/23/98. Twenty-four compounds exceeded 25%D. The associated sample results were validated with an R flag. There is no CCV listed on the sequence log or in this package of 2/23/98 and it is assumed that the SSCCV of 2/23/98 was used for both. The associated data is not double flagged for CCV issues already flagged as SSCV issues.
2. The SSCCV of 2/24/98 is missing six compounds and two others exceeded the recovery criteria. The associated data was R flagged. There is no CCV listed on the sequence log or in this package of 2/24/98 and it is assumed that the SSCCV of 2/24/98 was used for both. The associated data is not double flagged for CCV issues already flagged as SSCV issues.

9. Holding Time

Holding times were met.

10. Summary**General Comments**

1. Methylene Chloride was detected > the RL in the method blank. This compound was detected < the calculated value in samples 1-4,6,7,&12 so the data were flagged U (by the lab). The concentration of Methylene chloride in samples -5, 8, 9, 10, and -11 were above the calculated value and were not U flagged.
2. The LCS of 2/24/98 exceeded recovery LCL criteria for MeCl. The associated samples detected results have been J flagged and non-detects have been R flagged. 1,3,5-trimethylbenzene exceeded the UCL and there is not mention of this in the case narrative. The associated sample results have been J flagged for detects and none flagged for non-detects.
3. Methylene chloride exceeded recovery LCL. No flagging has been applied as the results have been rejected for a number of reasons.
4. Methylene chloride exceeded the ICAL RSD criteria (2/24/98) and the associated sample results have been R flagged.
5. The ICAL raw data is from a 2/23/98 calibration and there is no 2/24/98 ICAL raw data included.
6. The SSCCV for 2/23/98 is missing and can be found in packages 9802180 where it is not required. Five compounds were missing from the SSCCV of 2/23/98. Twenty-four compounds exceeded 25%D. The associated sample results were validated with an R

6521346

9802151 SW8260A

Page 4 of 18

flag. There is no CCV listed on the sequence log or in this package of 2/23/98 and it is assumed that the SSCCV of 2/23/98 was used for both. The associated data is not double flagged for CCV issues already flagged as SSCV issues.

7. The SSCCV of 2/24/98 is missing six compounds and two others exceeded the recovery criteria. The associated data was R flagged. There is no CCV listed on the sequence log or in this package of 2/24/98 and it is assumed that the SSCCV of 2/24/98 was used for both. The associated data is not double flagged for CCV issues already flagged as SSCV issues.

Data Package Completeness	<ol style="list-style-type: none">1. There are no 1X results for samples requiring dilution.2. There is no demonstration of a MDL being completed within 1yr.3. Lab ID 9802151-8 is included in the edata, but no hardcopy was included in this package.4. Missing SSCCV of 2/23/98.5. There is no documentation in the case narrative covering the SSCCV and CCV exceedances.6. All requested analyses completed as defined by the COC and any - exception reports.
Forms Review/ Items of Interest	Lab ID 9802151-8 is included in the edata, but no hardcopy was included in this package.
COC Review	All necessary chain of custody procedures were adhered to and the documentation is complete.

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA003	1,1,1,2-TETRACHLOROETHANE	0.5	R	U	0.148	0.5	UG/L	SSCCV%
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	SSCCV%
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	SSCCV%
	1,1,2-TRICHLOROETHANE	1	R	U	0.16	1	UG/L	SSCCV%
	1,1-DICHLOROETHANE	0.4	R	U	0.11	0.4	UG/L	SSCCV%
	1,1-DICHLOROETHENE	1.2	R	U	0.15	1.2	UG/L	SSCCV%
	1,1-DICHLOROPROPENE	1	R	U	0.14	1	UG/L	SSCCV%
	1,2,3-TRICHLOROBENZENE	0.3	U	U	0.15	0.3	UG/L	SSCCV%
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	SSCCV%
	1,2,4-TRICHLOROBENZENE	0.4	R	U	0.13	0.4	UG/L	SSCCV%
	1,2,4-TRIMETHYLBENZENE	1.3	R	U	0.09	1.3	UG/L	SSCCV%
	2-DIBROMO-3-CHLOROPROPANE	2.6	U	U	0.25	2.6	UG/L	SSCCV%
	1,2-DIBROMOETHANE	0.6	R	U	0.19	— 0.6	UG/L	SSCCV%
	1,2-DICHLOROBENZENE	0.3	U-	U	0.1	0.3	UG/L	SSCCV%
	1,2-DICHLOROETHANE	0.6	R	U	0.33	0.6	UG/L	SSCCV%
	1,2-DICHLOROPROPANE	0.4	R	U	0.09	0.4	UG/L	SSCCV%
	1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	SSCCV%
	1,3-DICHLOROPROPANE	0.4	R	U	0.15	0.4	UG/L	SSCCV%
	1,4-DICHLOROBENZENE	0.3	R	U	0.12	0.3	UG/L	SSCCV%
	1-CHLOROHEXANE	0.5	U	U	0.14	0.5	UG/L	—
	2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L	—
	2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	—
	4-BROMOFLUOROBENZENE	99	—	—	0.1	0.1	ERCEN	—
	4-CHLOROTOLUENE	— 0.6	U	U	0.08	0.6	UG/L	—
	BENZENE	0.4	U	U	— 0.1	0.4	UG/L	—
	BROMOBENZENE	0.3	R	U	0.09	0.3	UG/L	SSCCV%
	BROMOCHLOROMETHANE	0.4	R	U	0.18	0.4	UG/L	SSCCV%
	BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L	SSCCV%
	BROMOFORM	1.2	R	U	0.18	1.2	UG/L	SSCCV%
	BROMOMETHANE	1.1	— R	U	0.2	1.1	UG/L	SCVMIS
	CARBON TETRACHLORIDE	2.1	R	U	0.16	2.1	UG/L	SSCCV%
	CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	—
	CHLOROETHANE	1	R	U	0.3	1	UG/L	SCVMIS
	CHLORFORM	0.3	U	U	0.15	0.3	UG/L	—
	CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	SCVMIS
	CIS-1,2-DICHLOROETHENE	1.2	U	U	0.08	1.2	UG/L	—
	CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L	—
	DIBROMOCHLOROMETHANE	0.5	R	U	0.16	0.5	UG/L	SSCCV%
	DIBROMOFLUOROMETHANE	93	—	—	0.1	0.1	ERCEN	—
	DIBROMOMETHANE	2.4	R	U	0.2	2.4	UG/L	SSCCV%
	DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L	SCVMIS
	ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L	—
	HEXAChLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L	—
	ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L	—
	m,p-xylene	1.3	U	U	0.22	1.3	UG/L	—
	METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BD%R
	METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BS%R

6521348

9802151 SW8260A

Page 6 of 18

METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	SSCCV%
N-BUTYLBENZENE	1.1	U	U	0.11	1.1	UG/L	
N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L	
NAPHTHALENE	0.4	U	U	0.12	0.4	UG/L	
O-XYLENE	1.1	R	U	0.13	1.1	UG/L	SSCCV%
P-ISOPROPYLtolUENE	1.2	U	U	0.09	1.2	UG/L	
SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L	
STYRENE	0.4	U	U	0.12	0.4	UG/L	
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L	
TETRACHLOROETHENE	1.4	R	U	0.17	1.4	UG/L	SSCCV%
TOLUENE	1.1	U	U	0.14	1.1	UG/L	
TOLUENE-D8	97			0.1	0.1	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.6	R	U	0.09	0.6	UG/L	SSCCV%
TRANS-1,3-DICHLOROPROPENE	1	U	U	0.17	1	UG/L	
TRICHLOROETHENE	1	U	U	0.1	1	UG/L	
TRICHLOROFUOROMETHANE	0.8	R	U	0.22	0.8	UG/L	SCVMIS
VINYL CHLORIDE	1.1	R	U	0.16	1.1	UG/L	SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA014	1,1,1,2-TETRACHLOROETHANE	10	R	U	2.96	10	UG/L	SSCCV%
	1,1,1-TRICHLOROETHANE	16	U	U	2.6	16	UG/L	
	1,1,2,2-TETRACHLOROETHANE	8	U	U	3.4	8	UG/L	
	1,1,2-TRICHLOROETHANE	20	R	U	3.2	20	UG/L	SSCCV%
	1,1-DICHLOROETHANE	8	R	U	2.2	8	UG/L	SSCCV%
	1,1-DICHLOROETHENE	24	R	U	3	24	UG/L	SSCCV%
	1,1-DICHLOROPROPENE	20	R	U	2.8	20	UG/L	SSCCV%
	1,2,3-TRICHLOROBENZENE	6	U	U	3	6	UG/L	
	1,2,3-TRICHLOROPROPANE	64	U	U	3	64	UG/L	
	1,2,4-TRICHLOROBENZENE	8	R	U	2.6	8	UG/L	SSCCV%
	1,2,4-TRIMETHYLBENZENE	26	R	U	1.8	26	UG/L	SSCCV%
	2-DIBROMO-3-CHLOROPROPANE	52	U	U	5	52	UG/L	
	1,2-DIBROMOETHANE	12	R	U	3.8	12	UG/L	SSCCV%
	1,2-DICHLOROBENZENE	6	U	U	-2	6	UG/L	
	1,2-DICHLOROETHANE	12	R	U	6.6	12	UG/L	SSCCV%
	1,2-DICHLOROPROPANE	8	R	U	1.8	8	UG/L	SSCCV%
	1,3-DICHLOROBENZENE	24	U	U	1	24	UG/L	
	1,3-DICHLOROPROPANE	8	R	U	3	8	UG/L	SSCCV%
	1,4-DICHLOROBENZENE	6	R	U	2.4	6	UG/L	SSCCV%
	1-CHLOROHEXANE	10	U	U	2.8	10	UG/L	
	2,2-DICHLOROPROPANE	70	U	U	6.4	70	UG/L	
	2-CHLOROTOLUENE	8	U	U	2	8	UG/L	
	4-BROMOFLUOROBENZENE	94			2	2	ERCEN	
	4-CHLOROTOLUENE	12	U	U	1.6	12	UG/L	
	BENZENE	8	U	U	2	8	UG/L	
	BROMOBENZENE	6	R	U	1.8	6	UG/L	SSCCV%
	BROMOCHLOROMETHANE	8	R	U	3.6	8	UG/L	SSCCV%
	BROMODICHLOROMETHANE	16	U	U	2	16	UG/L	
	BROMOFORM	24	R	U	3.6	24	UG/L	SSCCV%
	BROMOMETHANE	22	R	U	4	22	UG/L	SCVMIS
	CARBON TETRACHLORIDE	42	R	U	3.2	42	UG/L	SSCCV%
	CHLOROBENZENE	8	U	U	2.4	8	UG/L	
	CHLOROETHANE	20	R	U	6	20	UG/L	
	CHLOROFORM	6	U	U	3	6	UG/L	SCVMIS
	CHLOROMETHANE	26	R	U	1.8	26	UG/L	SCVMIS
	CIS-1,2-DICHLOROETHENE	53			1.6	24	UG/L	

6521349

CIS-1,3-DICHLOROPROPENE	20	U	U	2.2	20	UG/L	
DIBROMOCHLOROMETHANE	10	R	U	3.2	10	UG/L	SSCCV%
DIBROMOFLUOROMETHANE	104			2	2	ERCEN	
DIBROMOMETHANE	48	R	U	4	48	UG/L	SSCCV%
DICHLORODIFLUOROMETHANE	20	R	U	7.2	20	UG/L	SCVMIS
ETHYLBENZENE	12	U	U	2.4	12	UG/L	
HEXACHLOROBUTADIENE	22	U	U	4	22	UG/L	
ISOPROPYLBENZENE	10	U	U	2.6	10	UG/L	
m,p-xylene	26	U	U	4.4	26	UG/L	
METHYLENE CHLORIDE	24	R		4.2	6	UG/L	SSCCV%
N-BUTYLBENZENE	22	U	U	2.2	22	UG/L	
N-PROPYLBENZENE	8	U	U	1.8	8	UG/L	
NAPHTHALENE	8	U	U	2.4	8	UG/L	
O-XYLENE	22	R	U	2.6	22	UG/L	SSCCV%
P-ISOPROPYLTOLUENE	24	U	U	1.8	24	UG/L	
SEC-BUTYLBENZENE	26	U	U	2.4	26	UG/L	
STYRENE	8	U	U	2.4	8	UG/L	
TERT-BUTYLBENZENE	28	U	U	2.6	28	UG/L	
TETRACHLOROETHENE	28	R	U	3.4	28	UG/L	SSCCV%
TOLUENE	22	U	U	2.8	22	UG/L	
TOLUENE-D8	104			2	2	ERCEN	
TRANS-1,2-DICHLOROETHENE	8.8	R	F	1.8	12	UG/L	SSCCV%
TRANS-1,3-DICHLOROPROPENE	20	U	U	3.4	20	UG/L	
TRICHLOROETHENE	450			2	20	UG/L	
TRICHLOROFLUOROMETHANE	16	R	U	4.4	16	UG/L	SCVMIS
VINYL CHLORIDE	22	R	U	3.2	22	UG/L	SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA015	1,1,1,2-TETRACHLOROETHANE	1	R	U	0.296	1	UG/L	SSCCV%
	1,1,1-TRICHLOROETHANE	1.6	U	U	0.26	1.6	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.8	U	U	0.34	0.8	UG/L	
	1,1,2-TRICHLOROETHANE	2	R	U	0.32	2	UG/L	SSCCV%
	1,1-DICHLOROETHANE	0.8	R	U	0.22	0.8	UG/L	SSCCV%
	1,1-DICHLOROETHENE	2.4	R	U	0.3	2.4	UG/L	SSCCV%
	1,1-DICHLOROPROPENE	2	R	U	0.28	2	UG/L	SSCCV%
	1,2,3-TRICHLOROBENZENE	0.6	U	U	0.3	0.6	UG/L	
	1,2,3-TRICHLOROPROPANE	6.4	U	U	0.3	6.4	UG/L	
	1,2,4-TRICHLOROBENZENE	0.8	R	U	0.26	0.8	UG/L	SSCCV%
	1,2,4-TRIMETHYLBENZENE	2.6	R	U	0.18	2.6	UG/L	SSCCV%
	2-DIBROMO-3-CHLOROPROPAN	5.2	U	U	0.5	5.2	UG/L	
	1,2-DIBROMOETHANE	1.2	R	U	0.38	1.2	UG/L	SSCCV%
	1,2-DICHLOROBENZENE	0.6	U	U	0.2	0.6	UG/L	
	1,2-DICHLOROETHANE	1.2	R	U	0.66	1.2	UG/L	SSCCV%
	1,2-DICHLOROPROPANE	0.8	R	U	0.18	0.8	UG/L	SSCCV%
	1,3-DICHLOROBENZENE	2.4	U	U	0.1	2.4	UG/L	
	1,3-DICHLOROPROPANE	0.8	R	U	0.3	0.8	UG/L	SSCCV%
	1,4-DICHLOROBENZENE	0.6	R	U	0.24	0.6	UG/L	SSCCV%
	1-CHLOROHEXANE	1	U	U	0.28	1	UG/L	
	2,2-DICHLOROPROPANE	7	U	U	0.64	7	UG/L	
	2-CHLOROTOLUENE	0.8	U	U	0.2	0.8	UG/L	
	4-BROMOFLUOROBENZENE	100			0.2	0.2	ERCEN	
	4-CHLOROTOLUENE	1.2	U	U	0.16	1.2	UG/L	
	BENZENE	0.8	U	U	0.2	0.8	UG/L	
	BROMOBENZENE	0.6	R	U	0.18	0.6	UG/L	SSCCV%
	BROMOCHLOROMETHANE	0.8	R	U	0.36	0.8	UG/L	SSCCV%

6521350

9802151 SW8260A

Page 8 of 18

BROMODICHLOROMETHANE	1.6	U	U	0.2	1.6	UG/L	
BROMOFORM	2.4	R	U	0.36	2.4	UG/L	SSCCV%
BROMOMETHANE	2.2	R	U	0.4	2.2	UG/L	SCVMIS
CARBON TETRACHLORIDE	4.2	R	U	0.32	4.2	UG/L	SSCCV%
CHLOROBENZENE	0.8	U	U	0.24	0.8	UG/L	
CHLOROETHANE	2	R	U	0.6	2	UG/L	SCVMIS
CHLOROFORM	0.6	U	U	0.3	0.6	UG/L	
CHLOROMETHANE	2.6	R	U	0.18	2.6	UG/L	SCVMIS
CIS-1,2-DICHLOROETHENE	39			0.16	2.4	UG/L	
CIS-1,3-DICHLOROPROPENE	2	U	U	0.22	2	UG/L	
DIBROMOCHLOROMETHANE	1	R	U	0.32	1	UG/L	SSCCV%
DIBROMOFLUOROMETHANE	107			0.2	0.2	ERCEN	
DIBROMOMETHANE	4.8	R	U	0.4	4.8	UG/L	SSCCV%
DICHLOROOFLUOROMETHANE	2	R	U	0.72	2	UG/L	SCVMIS
ETHYLBENZENE	1.2	U	U	0.24	1.2	UG/L	
HEXACHLOROBUTADIENE	2.2	U	U	0.4	2.2	UG/L	
ISOPROPYLBENZENE	1	U	U	0.26	1	UG/L	
m,p-xylene	2.6	U	U	0.44	2.6	UG/L	
METHYLENE CHLORIDE	1.4	R	U	0.42	0.6	UG/L	BD%R
METHYLENE CHLORIDE	1.4	R	U	0.42	0.6	UG/L	BS%R
METHYLENE CHLORIDE	1.4	R	U	0.42	0.6	UG/L	SSCCV%
N-BUTYLBENZENE	2.2	U	U	0.22	2.2	UG/L	
N-PROPYLBENZENE	0.8	U	U	0.18	0.8	UG/L	
NAPHTHALENE	0.8	U	U	0.24	0.8	UG/L	
O-XYLENE	2.2	R	U	0.26	2.2	UG/L	SSCCV%
P-ISOPROPYLtolUENE	2.4	U	U	0.18	2.4	UG/L	
SEC-BUTYLBENZENE	2.6	U	U	0.24	2.6	UG/L	
STYRENE	0.8	U	U	0.24	0.8	UG/L	
TERT-BUTYLBENZENE	2.8	U	U	0.26	2.8	UG/L	
TETRACHLOROETHENE	23	R		0.34	2.8	UG/L	SSCCV%
TOLUENE	2.2	U	U	0.28	2.2	UG/L	
TOLUENE-08	98			0.2	0.2	ERCEN	
TRANS-1,2-DICHLOROETHENE	33	R		0.18	1.2	UG/L	SSCCV%
TRANS-1,3-DICHLOROPROPENE	2	U	U	0.34	2	UG/L	
TRICHLOROETHENE	57			0.2	2	UG/L	
TRICHLOROFUOROMETHANE	1.6	R	U	0.44	1.6	UG/L	SCVMIS
VINYL CHLORIDE	2.2	R	U	0.32	2.2	UG/L	SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA016	1,1,1,2-TETRACHLOROETHANE	0.5	R	U	0.148	0.5	UG/L	SSCCV%
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	R	U	0.16	1	UG/L	SSCCV%
	1,1-DICHLOROETHANE	0.4	R	U	0.11	0.4	UG/L	SSCCV%
	1,1-DICHLOROETHENE	1.2	R	U	0.15	1.2	UG/L	SSCCV%
	1,1-OICHLOROPROPENE	1	R	U	0.14	1	UG/L	SSCCV%
	1,2,3-TRICHLOROBENZENE	0.3	U	U	0.15	0.3	UG/L	
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	R	U	0.13	0.4	UG/L	SSCCV%
	1,2,4-TRIMETHYLBENZENE	1.3	R	U	0.09	1.3	UG/L	SSCCV%
	2-DIBROMO-3-CHLOROPROPAN	2.6	U	U	0.25	2.6	UG/L	
	1,2-DIBROMOETHANE	0.6	R	U	0.19	0.6	UG/L	SSCCV%
	1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
	1,2-DICHLOROETHANE	0.6	R	U	0.33	0.6	UG/L	SSCCV%
	1,2-DICHLOROPROPANE	0.4	R	U	0.09	0.4	UG/L	SSCCV%

6521351

1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L		
1,3-DICHLOROPROPANE	0.4	R	U	0.15	0.4	UG/L	SSCCV%	
1,4-DICHLOROBENZENE	0.3	R	U	0.12	0.3	UG/L	SSCCV%	
1-CHLOROHEXANE	0.5	U	U	0.14	0.5	UG/L		
2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L		
2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L		
4-BROMOFLUOROBENZENE	100			0.1	0.1	ERCEN		
4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L		
BENZENE	0.4	U	U	0.1	0.4	UG/L		
BROMOBENZENE	0.3	R	U	0.09	0.3	UG/L	SSCCV%	
BROMOCHLOROMETHANE	0.4	R	U	0.18	0.4	UG/L	SSCCV%	
BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L		
BROMOFORM	1.2	R	U	0.18	1.2	UG/L	SSCCV%	
BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	SCVMIS	
CARBON TETRACHLORIDE	2.1	R	U	0.16	2.1	UG/L	SSCCV%	
CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L		
CHLOROETHANE	1	R	U	0.3	1	UG/L	SCVMIS	
CHLOROFORM	0.3	U	U	0.15	0.3	UG/L		
CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	SCVMIS	
CIS-1,2-DICHLOROETHENE	1.2	U	U	0.08	1.2	UG/L		
CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L		
DIBROMOCHLOROMETHANE	0.5	R	U	0.16	0.5	UG/L	SSCCV%	
DIBROMOFLUOROMETHANE	100			0.1	0.1	ERCEN		
DIBROMOMETHANE	2.4	R	U	0.2	2.4	UG/L	SSCCV%	
DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L	SCVMIS	
ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L		
HEXAChLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L		
ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L		
m,p-xylene	1.3	U	U	0.22	1.3	UG/L		
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BD%R	
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BS%R	
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	SSCCV%	
N-BUTYLBENZENE	1.1	U	U	0.11	1.1	UG/L		
N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L		
NAPHTHALENE	0.4	U	U	0.12	0.4	UG/L		
O-XYLENE	1.1	R	U	0.13	1.1	UG/L	SSCCV%	
P-ISOPROPYLtolUENE	1.2	U	U	0.09	1.2	UG/L		
SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L		
STYRENE	0.4	U	U	0.12	0.4	UG/L		
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L		
TETRACHLOROETHENE	1.4	R	U	0.17	1.4	UG/L	SSCCV%	
TOLUENE	1.1	U	U	0.14	1.1	UG/L		
TOLUENE-D8	102			0.1	0.1	ERCEN		
TRANS-1,2-DICHLOROETHENE	0.6	R	U	0.09	0.6	UG/L	SSCCV%	
TRANS-1,3-DICHLOROPROPENE	1	U	U	0.17	1	UG/L		
TRICHLOROETHENE	1	U	U	0.1	1	UG/L		
TRICHLOROFLUOROMETHANE	0.8	R	U	0.22	0.8	UG/L	SCVMIS	
VINYL CHLORIDE	1.1	R	U	0.16	1.1	UG/L	SCVMIS	

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA017	1,1,1,2-TETRACHLOROETHANE	10	exclude	U	2.96	10	UG/L	RE
	1,1,1,2-TETRACHLOROETHANE	0.5	R	U	0.148	0.5	UG/L	SSCCV%
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,1-TRICHLOROETHANE	16	exclude	U	2.6	16	UG/L	RE
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	

1,1,2,2-TETRACHLOROETHANE	8	exclude	U	3.4	8	UG/L	RE
1,1,2-TRICHLOROETHANE	1	R	U	0.16	1	UG/L	SSCCV%
1,1,2-TRICHLOROETHANE	20	exclude	U	3.2	20	UG/L	RE
1,1-DICHLOROETHANE	0.4	R	U	0.11	0.4	UG/L	SSCCV%
1,1-DICHLOROETHANE	8	exclude	U	2.2	8	UG/L	RE
1,1-DICHLOROETHENE	1.2	R	U	0.15	1.2	UG/L	SSCCV%
1,1-DICHLOROETHENE	24	exclude	U	3	24	UG/L	RE
1,1-DICHLOROPROPENE	20	exclude	U	2.8	20	UG/L	RE
1,1-DICHLOROPROPENE	1	R	U	0.14	1	UG/L	SSCCV%
1,2,3-TRICHLOROBENZENE	0.3	U	U	0.15	0.3	UG/L	
1,2,3-TRICHLOROBENZENE	6	exclude	U	3	6	UG/L	RE
1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
1,2,3-TRICHLOROPROPANE	64	exclude	U	3	64	UG/L	RE
1,2,4-TRICHLOROBENZENE	0.4	R	U	0.13	0.4	UG/L	SSCCV%
1,2,4-TRICHLOROBENZENE	8	exclude	U	2.6	8	UG/L	RE
1,2,4-TRIMETHYLBENZENE	26	exclude	U	1.8	26	UG/L	RE
1,2,4-TRIMETHYLBENZENE	1.3	R	U	0.09	1.3	UG/L	SSCCV%
2-DIBROMO-3-CHLOROPROPANE	2.6	U	U	0.25	2.6	UG/L	
2-DIBROMO-3-CHLOROPROPANE	52	exclude	U	5	52	UG/L	RE
1,2-DIBROMOETHANE	0.6	R	U	0.19	0.6	UG/L	SSCCV%
1,2-DIBROMOETHANE	12	exclude	U	3.8	12	UG/L	RE
1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
1,2-DICHLOROBENZENE	6	exclude	U	2	6	UG/L	RE
1,2-DICHLOROETHANE	12	exclude	U	6.6	12	UG/L	RE
1,2-DICHLOROETHANE	0.6	R	U	0.33	0.6	UG/L	SSCCV%
1,2-DICHLOROPROPANE	0.4	R	U	0.09	0.4	UG/L	SSCCV%
1,2-DICHLOROPROPANE	8	exclude	U	1.8	8	UG/L	RE
1,3,5-TRIMETHYLBENZENE	10	exclude	U	2	10	UG/L	RE
1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
1,3-DICHLOROBENZENE	24	exclude	U	1	24	UG/L	RE
1,3-DICHLOROPROPANE	0.4	R	U	0.15	0.4	UG/L	SSCCV%
1,3-DICHLOROPROPANE	8	exclude	U	3	8	UG/L	RE
1,4-DICHLOROBENZENE	0.3	R	U	0.12	0.3	UG/L	SSCCV%
1,4-DICHLOROBENZENE	6	exclude	U	2.4	6	UG/L	RE
1-CHLOROHEXANE	10	exclude	U	2.8	10	UG/L	RE
1-CHLOROHEXANE	0.5	U	U	0.14	0.5	UG/L	
2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L	
2,2-DICHLOROPROPANE	70	exclude	U	6.4	70	UG/L	RE
2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	
2-CHLOROTOLUENE	8	exclude	U	2	8	UG/L	RE
4-BROMOFLUOROBENZENE	98			2	2	ERCEN	
4-BROMOFLUOROBENZENE	98			0.1	0.1	ERCEN	
4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L	
4-CHLOROTOLUENE	12	exclude	U	1.6	12	UG/L	RE
BENZENE	0.4	U	U	0.1	0.4	UG/L	
BENZENE	8	exclude	U	2	8	UG/L	RE
BROMOBENZENE	0.3	R	U	0.09	0.3	UG/L	SSCCV%
BROMOBENZENE	6	exclude	U	1.8	6	UG/L	RE
BROMOCHLOROMETHANE	8	exclude	U	3.6	8	UG/L	RE
BROMOCHLOROMETHANE	0.4	R	U	0.18	0.4	UG/L	SSCCV%
BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L	
BROMODICHLOROMETHANE	16	exclude	U	2	16	UG/L	RE
BROMOFORM	1.2	R	U	0.18	1.2	UG/L	SSCCV%
BROMOFORM	24	exclude	U	3.6	24	UG/L	RE
BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	SCVMIS
BROMOMETHANE	22	exclude	U	4	22	UG/L	RE

CARBON TETRACHLORIDE	42	exclude	U	3.2	42	UG/L	RE
CARBON TETRACHLORIDE	2.1	R	U	0.16	2.1	UG/L	SSCCV%
CHLOROBENZENE	8	exclude	U	2.4	8	UG/L	RE
CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	
CHLOROETHANE	1	R	U	0.3	1	UG/L	SCVMIS
CHLOROETHANE	20	exclude	U	6	20	UG/L	RE
CHLOROFORM	0.49			0.15	0.3	UG/L	
CHLOROFORM	6	exclude	U	3	6	UG/L	RE
CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	SCVMIS
CHLOROMETHANE	26	exclude	U	1.8	26	UG/L	RE
CIS-1,2-DICHLOROETHENE	7	exclude	F	1.6	24	UG/L	RE
CIS-1,2-DICHLOROETHENE	7.9			0.08	1.2	UG/L	
CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L	
CIS-1,3-DICHLOROPROPENE	20	exclude	U	2.2	20	UG/L	RE
DIBROMOCHLOROMETHANE	10	exclude	U	3.2	10	UG/L	RE
DIBROMOCHLOROMETHANE	0.5	R	U	0.16	0.5	UG/L	SSCCV%
DIBROMOFLUOROMETHANE	106			2	2	ERCEN	
DIBROMOFLUOROMETHANE	107			0.1	0.1	ERCEN	
DIBROMOMETHANE	2.4	R	U	0.2	2.4	UG/L	SSCCV%
DIBROMOMETHANE	48	exclude	U	4	48	UG/L	RE
DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L	SCVMIS
DICHLORODIFLUOROMETHANE	20	exclude	U	7.2	20	UG/L	RE
ETHYLBENZENE	12	exclude	U	2.4	12	UG/L	RE
ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L	
HEXACHLOROBUTADIENE	11	U	U	0.2	1.1	UG/L	
HEXACHLOROBUTADIENE	22	exclude	U	4	22	UG/L	RE
ISOPROPYLBENZENE	10	exclude	U	2.6	10	UG/L	RE
ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L	
m,p-xylene	13	U	U	0.22	1.3	UG/L	
m,p-xylene	26	exclude	U	4.4	26	UG/L	RE
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BD%R
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BS%R
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	SSCCV%
METHYLENE CHLORIDE	25	exclude		4.2	6	UG/L	RE
N-BUTYLBENZENE	11	U	U	0.11	11	UG/L	
N-BUTYLBENZENE	22	exclude	U	2.2	22	UG/L	RE
N-PROPYLBENZENE	8	exclude	U	1.8	8	UG/L	RE
N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L	
NAPHTHALENE	0.4	U	U	0.12	0.4	UG/L	
NAPHTHALENE	8	exclude	U	2.4	8	UG/L	RE
O-XYLENE	1.1	R	U	0.13	1.1	UG/L	SSCCV%
O-XYLENE	22	exclude	U	2.6	22	UG/L	RE
P-ISOPROPYLtolUENE	12	U	U	0.09	1.2	UG/L	
P-ISOPROPYLtolUENE	24	exclude	U	1.8	24	UG/L	RE
SEC-BUTYLBENZENE	13	U	U	0.12	1.3	UG/L	
SEC-BUTYLBENZENE	26	exclude	U	2.4	26	UG/L	RE
STYRENE	0.4	U	U	0.12	0.4	UG/L	
STYRENE	8	exclude	U	2.4	8	UG/L	RE
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L	
TERT-BUTYLBENZENE	28	exclude	U	2.6	28	UG/L	RE
TETRACHLOROETHENE	2.2	R		0.17	1.4	UG/L	SSCCV%
TETRACHLOROETHENE	28	exclude	U	3.4	28	UG/L	RE
TOLUENE	1.1	U	U	0.14	1.1	UG/L	
TOLUENE	22	exclude	U	2.8	22	UG/L	RE
TOLUENE-D8	100			2	2	ERCEN	
TOLUENE-D8	102			0.1	0.1	ERCEN	

6521351

9802151 SW8260A

Page 12 of 18

TRANS-1,2-DICHLOROETHENE	0.6	R	U	0.09	0.6	UG/L	SSCCV%
TRANS-1,2-DICHLOROETHENE	12	exclude	U	1.8	12	UG/L	RE
CIS-1,3-DICHLOROPROPENE	20	exclude	U	3.4	20	UG/L	RE
CIS-1,3-DICHLOROPROPENE	1	U	U	0.17	1	UG/L	
TRICHLOROETHENE	350	exclude	E	0.1	1	UG/L	RE
TRICHLOROETHENE	320			2	20	UG/L	
TRICHLOROFLUOROMETHANE	0.8	R	U	0.22	0.8	UG/L	SCVMIS
TRICHLOROFLUOROMETHANE	16	exclude	U	4.4	16	UG/L	RE
VINYL CHLORIDE	1.1	R	U	0.16	1.1	UG/L	SCVMIS
VINYL CHLORIDE	22	exclude	U	3.2	22	UG/L	RE

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA018FD1	1,1,1,2-TETRACHLOROETHANE	10	R	U	2.96	10	UG/L	SSCCV%
	1,1,1-TRICHLOROETHANE	16	U	U	2.6	16	UG/L	
	1,1,2,2-TETRACHLOROETHANE	8	U	U	3.4	8	UG/L	
	1,1,2-TRICHLOROETHANE	20	R	U	3.2	20	UG/L	SSCCV%
	1,1-DICHLOROETHANE	8	R	U	2.2	8	UG/L	SSCCV%
	1,1-DICHLOROETHENE	24	R	U	3	24	UG/L	SSCCV%
	1,1-DICHLOROPROPENE	20	R	U	2.8	20	UG/L	SSCCV%
	1,2,3-TRICHLOROBENZENE	6	U	U	3	6	UG/L	
	1,2,3-TRICHLOROPROPANE	64	U	U	3	64	UG/L	
	1,2,4-TRICHLOROBENZENE	8	R	U	2.6	8	UG/L	SSCCV%
	1,2,4-TRIMETHYLBENZENE	26	R	U	1.8	26	UG/L	SSCCV%
	2-DIBROMO-3-CHLOROPROPANE	52	U	U	5	52	UG/L	
	1,2-DIBROMOETHANE	12	R	U	3.8	12	UG/L	SSCCV%
	1,2-DICHLOROBENZENE	6	U	U	2	6	UG/L	
	1,2-DICHLOROETHANE	12	R	U	6.6	12	UG/L	SSCCV%
	1,2-DICHLOROPROPANE	8	R	U	1.8	8	UG/L	SSCCV%
	1,3-DICHLOROBENZENE	24	U	U	1	24	UG/L	
	1,3-DICHLOROPROPANE	8	R	U	3	8	UG/L	SSCCV%
	1,4-DICHLOROBENZENE	6	R	U	2.4	6	UG/L	SSCCV%
	1-CHLOROHEXANE	10	U	U	2.8	10	UG/L	
	2,2-DICHLOROPROPANE	70	U	U	6.4	70	UG/L	
	2-CHLOROTOLUENE	8	U	U	2	8	UG/L	
	4-BROMOFLUOROBENZENE	99			2	2	ERCEN	
	4-CHLOROTOLUENE	12	U	U	1.6	12	UG/L	
	BENZENE	8	U	U	2	8	UG/L	
	BROMOBENZENE	6	R	U	1.8	6	UG/L	SSCCV%
	BROMOCHLOROMETHANE	8	R	U	3.6	8	UG/L	SSCCV%
	BROMODICHLOROMETHANE	16	U	U	2	16	UG/L	
	BROMOFORM	24	R	U	3.6	24	UG/L	SSCCV%
	BROMOMETHANE	22	R	U	4	22	UG/L	SCVMIS
	CARBON TETRACHLORIDE	42	R	U	3.2	42	UG/L	SSCCV%
	CHLOROBENZENE	8	U	U	2.4	8	UG/L	
	CHLOROETHANE	20	R	U	6	20	UG/L	SCVMIS
	CHLOROFORM	6	U	U	3	6	UG/L	
	CHLOROMETHANE	26	R	U	1.8	26	UG/L	SCVMIS
	CIS-1,2-DICHLOROETHENE	8.2	F	F	1.6	24	UG/L	
	CIS-1,3-DICHLOROPROPENE	20	U	U	2.2	20	UG/L	
	DIBROMOCHLOROMETHANE	10	R	U	3.2	10	UG/L	SSCCV%
	DIBROMOFLUOROMETHANE	107			2	2	ERCEN	
	DIBROMOMETHANE	48	R	U	4	48	UG/L	SSCCV%
	DICHLORODIFLUOROMETHANE	20	R	U	7.2	20	UG/L	SCVMIS
	ETHYLBENZENE	12	U	U	2.4	12	UG/L	
	HEXAChLOROBUTADIENE	22	U	U	4	22	UG/L	

ISOPROPYLBENZENE	10	U	U	2.6	10	UG/L	
m,p-xylene	26	U	U	4.4	26	UG/L	
METHYLENE CHLORIDE	24	R	U	4.2	6	UG/L	SSCCV%
N-BUTYLBENZENE	22	U	U	2.2	22	UG/L	
N-PROPYLBENZENE	8	U	U	1.8	8	UG/L	
NAPHTHALENE	8	U	U	2.4	8	UG/L	
O-XYLENE	22	R	U	2.6	22	UG/L	SSCCV%
P-ISOPROPYLtolUENE	24	U	U	1.8	24	UG/L	
SEC-BUTYLBENZENE	26	U	U	2.4	26	UG/L	
STYRENE	8	U	U	2.4	8	UG/L	
TERT-BUTYLBENZENE	28	U	U	2.6	28	UG/L	
TETRACHLOROETHENE	28	R	U	3.4	28	UG/L	SSCCV%
TOLUENE	22	U	U	2.8	22	UG/L	
TOLUENE-D8	99			2	2	ERCEN	
TRANS-1,2-DICHLOROETHENE	12	R	U	1.8	12	UG/L	SSCCV%
TRANS-1,3-DICHLOROPROPENE	20	U	U	3.4	20	UG/L	
TRICHLOROETHENE	380			2	20	UG/L	
TRICHLOROFLUOROMETHANE	16	R	U	4.4	16	UG/L	SCVMIS
VINYL CHLORIDE	22	R	U	3.2	22	UG/L	SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA019	1,1,1,2-TETRACHLOROETHANE	10	R	U	2.96	10	UG/L	SSCCV%
	1,1,1-TRICHLOROETHANE	16	U	U	2.6	16	UG/L	
	1,1,2,2-TETRACHLOROETHANE	8	U	U	3.4	8	UG/L	
	1,1,2-TRICHLOROETHANE	20	R	U	3.2	20	UG/L	SSCCV%
	1,1-DICHLOROETHANE	8	R	U	2.2	8	UG/L	SSCCV%
	1,1-DICHLOROETHENE	24	R	U	3	24	UG/L	SSCCV%
	1,1-DICHLOROPROPENE	20	R	U	2.8	20	UG/L	SSCCV%
	1,2,3-TRICHLOROBENZENE	6	U	U	3	6	UG/L	
	1,2,3-TRICHLOROPROPANE	64	U	U	3	64	UG/L	
	1,2,4-TRICHLOROBENZENE	8	R	U	2.6	8	UG/L	SSCCV%
	1,2,4-TRIMETHYLBENZENE	26	R	U	1.8	26	UG/L	SSCCV%
	2-DIBROMO-3-CHLOROPROPAN	52	U	U	5	52	UG/L	
	1,2-DIBROMOETHANE	12	R	U	3.8	12	UG/L	SSCCV%
	1,2-DICHLOROBENZENE	6	U	U	2	6	UG/L	
	1,2-DICHLOROETHANE	12	R	U	6.6	12	UG/L	SSCCV%
	1,2-DICHLOROPROPANE	8	R	U	1.8	8	UG/L	SSCCV%
	1,3-DICHLOROBENZENE	24	U	U	1	24	UG/L	
	1,3-DICHLOROPROPANE	8	R	U	3	8	UG/L	SSCCV%
	1,4-DICHLOROBENZENE	6	R	U	2.4	6	UG/L	SSCCV%
	1-CHLOROHEXANE	10	U	U	2.8	10	UG/L	
	2,2-DICHLOROPROPANE	70	U	U	6.4	70	UG/L	
	2-CHLOROTOLUENE	8	U	U	2	8	UG/L	
	4-BROMOFLUOROBENZENE	100			2	2	ERCEN	
	4-CHLOROTOLUENE	12	U	U	1.6	12	UG/L	
	BENZENE	8	U	U	2	8	UG/L	
	BROMOBENZENE	6	R	U	1.8	6	UG/L	SSCCV%
	BROMOCHLOROMETHANE	8	R	U	3.6	8	UG/L	SSCCV%
	BROMODICHLOROMETHANE	16	U	U	2	16	UG/L	
	BROMOFORM	24	R	U	3.6	24	UG/L	SSCCV%
	BROMOMETHANE	22	R	U	4	22	UG/L	SCVMIS
	CARBON TETRACHLORIDE	42	R	U	3.2	42	UG/L	SSCCV%
	CHLOROBENZENE	8	U	U	2.4	8	UG/L	
	CHLOROETHANE	20	R	U	6	20	UG/L	SCVMIS
	CHLOROFORM	6	U	U	3	6	UG/L	

6521356

9802151 SW8260A

Page 14 of 18

CHLOROMETHANE	26	R	U	1.8	26	UG/L	SCVMIS
CIS-1,2-DICHLOROETHENE	24	U	U	1.6	24	UG/L	
CIS-1,3-DICHLOROPROPENE	20	U	U	2.2	20	UG/L	
DIBROMOCHLOROMETHANE	10	R	U	3.2	10	UG/L	SSCCV%
DIBROMOFLUOROMETHANE	106			2	2	ERCEN	
DIBROMOMETHANE	48	R	U	4	48	UG/L	SSCCV%
DICHLORODIFLUOROMETHANE	20	R	U	7.2	20	UG/L	SCVMIS
ETHYLBENZENE	12	U	U	2.4	12	UG/L	
HEXACHLOROBUTADIENE	22	U	U	4	22	UG/L	
ISOPROPYLBENZENE	10	U	U	2.6	10	UG/L	
m,p-xylene	26	U	U	4.4	26	UG/L	
METHYLENE CHLORIDE	24	R	U	4.2	6	UG/L	SSCCV%
N-BUTYLBENZENE	22	U	U	2.2	22	UG/L	
N-PROPYLBENZENE	8	U	U	1.8	8	UG/L	
NAPHTHALENE	8	U	U	2.4	8	UG/L	
O-XYLENE	22	R	U	2.6	22	UG/L	SSCCV%
P-ISOPROPYLTOLUENE	24	U	U	1.8	24	UG/L	
SEC-BUTYLBENZENE	26	U	U	2.4	26	UG/L	
STYRENE	8	U	U	2.4	8	UG/L	
TERT-BUTYLBENZENE	28	U	U	2.6	28	UG/L	
TETRACHLOROETHENE	28	R	U	3.4	28	UG/L	SSCCV%
TOLUENE	22	U	U	2.8	22	UG/L	
TOLUENE-D8	96			-2	2	ERCEN	
TRANS-1,2-DICHLOROETHENE	12	R	U	1.8	12	UG/L	SSCCV%
TRANS-1,3-DICHLOROPROPENE	20	U	U	3.4	20	UG/L	
TRICHLOROETHENE	330			2	20	UG/L	
TRICHLOROFLUOROMETHANE	16	R	U	4.4	16	UG/L	SCVMIS
VINYL CHLORIDE	22	R	U	3.2	22	UG/L	SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA020	1,1,1,2-TETRACHLOROETHANE	25	U	U	7.4	25	UG/L	
	1,1,1-TRICHLOROETHANE	40	U	U	6.5	40	UG/L	
	1,1,2,2-TETRACHLOROETHANE	20	U	U	8.5	20	UG/L	
	1,1,2-TRICHLOROETHANE	50	U	U	8	50	UG/L	
	1,1-DICHLOROETHANE	20	U	U	5.5	20	UG/L	
	1,1-DICHLOROETHENE	60	U	U	7.5	60	UG/L	
	1,1-DICHLOROPROPENE	50	U	U	7	50	UG/L	
	1,2,3-TRICHLOROBENZENE	15	U	U	7.5	15	UG/L	
	1,2,3-TRICHLOROPROPANE	160	U	U	7.5	160	UG/L	
	1,2,4-TRICHLOROBENZENE	20	U	U	6.5	20	UG/L	
	1,2,4-TRIMETHYLBENZENE	65	U	U	4.5	65	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	130	U	U	12.5	130	UG/L	
	1,2-DIBROMOETHANE	30	U	U	9.5	30	UG/L	
	1,2-DICHLOROBENZENE	15	U	U	5	15	UG/L	
	1,2-DICHLOROETHANE	30	U	U	16.5	30	UG/L	
	1,2-DICHLOROPROPANE	20	U	U	4.5	20	UG/L	
	1,3,5-TRIMETHYLBENZENE	25	U	U	5	25	UG/L	
	1,3-DICHLOROBENZENE	60	U	U	2.5	60	UG/L	
	1,3-DICHLOROPROPANE	20	U	U	7.5	20	UG/L	
	1,4-DICHLOROBENZENE	15	U	U	6	15	UG/L	
	1-CHLOROHEXANE	25	U	U	7	25	UG/L	
	2,2-DICHLOROPROPANE	180	U	U	16	180	UG/L	
	2-CHLOROTOLUENE	20	U	U	5	20	UG/L	
	4-BROMOFLUOROBENZENE	98			5	5	ERCEN	
	4-CHLOROTOLUENE	30	U	U	4	30	UG/L	

6521357

BENZENE	20	U	U	5	20	UG/L	
BROMOBENZENE	15	U	U	45	15	UG/L	
BROMOCHLOROMETHANE	20	R	U	9	20	UG/L	SSCCV%
BROMODICHLOROMETHANE	40	U	U	5	40	UG/L	
BROMOFORM	60	U	U	9	60	UG/L	
BROMOMETHANE	55	R	U	10	55	UG/L	SCVMIS
CARBON TETRACHLORIDE	110	U	U	8	110	UG/L	
CHLOROBENZENE	20	U	U	6	20	UG/L	
CHLOROETHANE	50	R	U	15	50	UG/L	SCVMIS
CHLOROFORM	15	U	U	7.5	15	UG/L	
CHLOROMETHANE	65	R	U	4.5	65	UG/L	SCVMIS
CIS-1,2-DICHLOROETHENE	28	F	F	4	60	UG/L	
CIS-1,3-DICHLOROPROPENE	50	U	U	5.5	50	UG/L	
DIBROMOCHLOROMETHANE	25	U	U	8	25	UG/L	
DIBROMOFLUOROMETHANE	105			5	5	ERCEN	
DIBROMOMETHANE	120	U	U	10	120	UG/L	
DICHLORODIFLUOROMETHANE	50	R	U	18	50	UG/L	SCVMIS
ETHYLBENZENE	30	U	U	6	30	UG/L	
HEXAChLOROBUTADIENE	55	U	U	10	55	UG/L	
ISOPROPYLBENZENE	25	U	U	6.5	25	UG/L	
m,p-xylene	65	U	U	11	65	UG/L	
METHYLENE CHLORIDE	180	R		10.5	15	UG/L	SSCCV%
N-BUTYLBENZENE	55	U	U	5.5	55	UG/L	
N-PROPYLBENZENE	20	U	U	4.5	20	UG/L	
NAPHTHALENE	20	U	U	6	20	UG/L	
O-XYLENE	55	U	U	6.5	55	UG/L	
P-ISOPROPYLtolUENE	60	U	U	4.5	60	UG/L	
SEC-BUTYLBENZENE	65	U	U	6	65	UG/L	
STYRENE	20	U	U	6	20	UG/L	
TERT-BUTYLBENZENE	70	U	U	6.5	70	UG/L	
TETRACHLOROETHENE	70	U	U	8.5	70	UG/L	
TOLUENE	55	U	U	7	55	UG/L	
TOLUENE-D8	104			5	5	ERCEN	
TRANS-1,2-DICHLOROETHENE	30	U	U	4.5	30	UG/L	
TRANS-1,3-DICHLOROPROPENE	50	U	U	8.5	50	UG/L	
TRICHLOROETHENE	1200			5	50	UG/L	
TRICHLOROFUOROMETHANE	40	R	U	11	40	UG/L	SCVMIS
VINYL CHLORIDE	55	R	U	8	55	UG/L	SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA021	1,1,1,2-TETRACHLOROETHANE	0.5	R	U	0.148	0.5	UG/L	SSCCV%
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	R	U	0.16	1	UG/L	SSCCV%
	1,1-DICHLOROETHANE	0.4	R	U	0.11	0.4	UG/L	SSCCV%
	1,1-DICHLOROETHENE	1.2	R	U	0.15	1.2	UG/L	SSCCV%
	1,1-DICHLOROPROPENE	1	R	U	0.14	1	UG/L	SSCCV%
	1,2,3-TRICHLOROBENZENE	0.3	U	U	0.15	0.3	UG/L	
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	R	U	0.13	0.4	UG/L	SSCCV%
	1,2,4-TRIMETHYLBENZENE	1.3	R	U	0.09	1.3	UG/L	SSCCV%
	2-DIBROMO-3-CHLOROPROPAN	2.6	U	U	0.25	2.6	UG/L	
	1,2-DIBROMOETHANE	0.6	R	U	0.19	0.6	UG/L	SSCCV%
	1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
	1,2-DICHLOROETHANE	0.6	R	U	0.33	0.6	UG/L	SSCCV%

6521358

9802151 SW8260A

Page 16 of 18

1,2-DICHLOROPROPANE	0.4	R	U	0.09	0.4	UG/L	SSCCV%
1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
1,3-DICHLOROPROPANE	0.4	R	U	0.15	0.4	UG/L	SSCCV%
1,4-DICHLOROBENZENE	0.3	R	U	0.12	0.3	UG/L	SSCCV%
1-CHLOROHEXANE	0.5	U	U	0.14	0.5	UG/L	
2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L	
2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	
4-BROMOFLUOROBENZENE	96			0.1	0.1	ERCEN	
4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L	
BENZENE	0.4	U	U	0.1	0.4	UG/L	
BROMOBENZENE	0.3	R	U	0.09	0.3	UG/L	SSCCV%
BROMOCHLOROMETHANE	0.4	R	U	0.18	0.4	UG/L	SSCCV%
BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L	
BROMOFORM	1.2	R	U	0.18	1.2	UG/L	SSCCV%
BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	SCVMIS
CARBON TETRACHLORIDE	2.1	R	U	0.16	2.1	UG/L	SSCCV%
CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	
CHLOROETHANE	1	R	U	0.3	1	UG/L	SCVMIS
CHLOROFORM	0.3	U	U	0.15	0.3	UG/L	
CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	SCVMIS
CIS-1,2-DICHLOROETHENE	1.2	U	U	0.08	1.2	UG/L	
CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L	
DIBROMOCHLOROMETHANE	0.5	R	U	0.16	0.5	UG/L	SSCCV%
DIBROMOFLUOROMETHANE	102			0.1	0.1	ERCEN	
DIBROMOMETHANE	2.4	R	U	0.2	2.4	UG/L	SSCCV%
DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L	SCVMIS
ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L	
HEXAChLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L	
ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L	
m,p-xylene	1.3	U	U	0.22	1.3	UG/L	
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BS%R
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	SSCCV%
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BD%R
N-BUTYLBENZENE	1.1	U	U	0.11	1.1	UG/L	
N-PROPYLBENZENE	-0.4	U	U	0.09	0.4	UG/L	
NAPHTHALENE	0.4	U	U	0.12	0.4	UG/L	
O-XYLENE	1.1	R	U	0.13	1.1	UG/L	SSCCV%
P-ISOPROPYL TOLUENE	1.2	U	U	0.09	1.2	UG/L	
SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L	
STYRENE	0.4	U	U	0.12	0.4	UG/L	
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L	
TETRAChLOROETHENE	1.4	R	U	0.17	1.4	UG/L	SSCCV%
TOLUENE	1.1	U	U	0.14	1.1	UG/L	
TOLUENE-D8	97			0.1	0.1	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.6	R	U	0.09	0.6	UG/L	SSCCV%
TRANS-1,3-DICHLOROPROPENE	1	U	U	0.17	1	UG/L	
TRICHLOROETHENE	0.85	F	F	0.1	1	UG/L	
TRICHLOROFUOROMETHANE	0.8	R	U	0.22	0.8	UG/L	SCVMIS
VINYL CHLORIDE	1.1	R	U	0.16	1.1	UG/L	SCVMIS

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>iCLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NOLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

6521360

9802151 SW8260A

Page 18 of 18

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria
SCVMISS	Missing target analyte

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

NAS FW JRB AOC 2

1485167

6521361



CH2MHILL

Data Quality Evaluation

SDG 9802159

Method SW8260A

Reviewer mhc

Date 5/23/98

Matrix Water

Senior Reviewer Vito D'Aurora

Field Samples

Field ID	QAQC Type	Field ID	QAQC Type	Field ID	QAQC Type
----------	-----------	----------	-----------	----------	-----------

Water

AIA013	N	AIA022TB1	TB	AIA023EB1	EB
AIA024	N	AIA025	N	AIA026	N
LABQC	BD				

1. Case Narrative Items of Interest

1. Methylene Chloride was detected > the RL in the method blank. This compound was detected < the calculated value in samples -2, 3, and 5, so the data were flagged U (by the lab). Sample -1,-4, and -6 had MeCl detected above the calculated value therefore, it is not flagged U.
2. All LCS/LCD recoveries and RPDs were within acceptance criteria with the exception of Methylene Chloride. The background levels of Methylene chloride detected in this laboratory can cause inconsistent and irreproducible results for low level analyses.
3. Due to the concentration of target analytes, samples were analyzed at a higher dilution.
5. All initial calibration criteria were within acceptance criteria. Method SW8260B states any compound exceeding 15% RSD criteria should be analyzed with a higher order curve such as a quadratic. We quantitated these compounds using the average response factor due to a software programming problem associated with Hewlett-Packard MSDs. The manufacturer is now aware of the problem and is working on a solution.

2. Blank Summary

Field Blanks 1. No target analytes detected >RL in either the trip blank or equipment blank.

Method Blanks Methylene Chloride was detected > the RL in the method blank. This compound was detected < the calculated value in samples -2, 3, and 5, so the data were

6521362

9802159 SW8260A

Page 2 of 10

flagged U (by the lab). Sample -1,-4, and -6 had MeCl detected above the calculated value therefore, it is not flagged U

<u>Blank Type</u>	<u>Blank ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Report Limit</u>	<u>LabFlag</u>	<u>Units</u>
LB	LABQC	METHYLENE CHLORI	0.58	0.21		UG/L

3. Spikes and Duplicates

Field Duplicates All criteria met.

Laboratory Duplicates None in this SDG

Matrix Spike MS/MSDs were not performed due to insufficient sample volume.

4. Laboratory Control Sample

The LCS of 2/25/98 exceeded recovery LCL criteria. The associated samples detected results have been J flagged and non-detects have been R flagged.

<u>Matrix</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>Analyte</u>	<u>Recovery</u>	<u>LowerLimit</u>	<u>UpperLimit</u>
WATER	BD	LABQC	METHYLENE CHLORIDE	54	75	125
WATER	BS	LABQC	METHYLENE CHLORIDE	55	75	125

5. Surrogates

All criteria were met.

6. Tuning and Mass Calibration

All criteria met.

7. Internal Standard

All internal standard recoveries were within acceptance criteria.

8. Calibration Information

Initial Calibration 1. Methylene chloride exceeded the ICAL RSD criteria (2/24/98) and the associated sample results have been R flagged.

Continuing Calibration 1. SSCCV not included in package. Package 9802168 share the same SSCCV this was used to validate this packaged. Six compounds were missing from the second source CCV from

2/24/98. Two compounds exceeded 25%D. The associated sample results were validated with an R flag.
2. The CCV of 2/25/98 MeCl exceeded 25%D. The associated sample results were validated with an R flag.

<u>Field ID</u>	<u>LabsampleID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation</u>
AIA013	9802159-1	METHYLENE CHLORIDE	R	CV%D
AIA024	9802159-4	METHYLENE CHLORIDE	R	CV%D
AIA025	9802159-5	METHYLENE CHLORIDE	R	CV%D
AIA026	9802159-6	METHYLENE CHLORIDE	R	CV%D

9. Holding Time

Holding times were met.

10. Summary

General Comments

1. Methylene Chloride was detected > the RL in the method blank. This compound was detected < the calculated value in samples -2, 3, and 5, so the data were flagged U (by the lab). Sample -1, -4, and -6 had MeCl detected above the calculated value therefore, it is not flagged U.
2. The LCS of 2/25/98 exceeded recovery LCL criteria. The associated samples detected results have been J flagged and non-detects have been R flagged.
3. Methylene chloride exceeded the RSD criteria and the associated sample results have been R flagged.
4. SSCCV not included in package. Package 9802168 share the same SSCCV this was used to validate this packaged. Six compounds were missing from the second source CCV from 2/24/98. Two compounds exceeded 25%D. The associated sample results were validated with an R flag.
5. The CCV of 2/25/98 MeCl exceeded 25%D. The associated sample results were validated with an R flag.

Data Package Completeness

1. There are no 1X results for all samples requiring dilution.
 2. There is no demonstration of a MDL being completed within 1yr.
 3. There is no documentation in the case narrative covering the SSCCV and CCV exceedances or missing analytes.
 4. The SSCCV is missing from this package.
 5. All requested analyses completed as defined by the COC and any exception reports.

Forms Review/ Items of Interest

Target analytes were detected > RL in all samples

COC Review

All necessary chain of custody procedures were adhered to and the documentation is complete.

6521364

9802159 SW8260A

Page 4 of 10

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA013	1,1,1,2-TETRACHLOROETHANE	5	U	U	1.48	5	UG/L	
	1,1,1-TRICHLOROETHANE	8	U	U	1.3	8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	4	U	U	1.7	4	UG/L	
	1,1,2-TRICHLOROETHANE	10	U	U	1.6	10	UG/L	
	1,1-DICHLOROETHANE	4	U	U	1.1	4	UG/L	
	1,1-DICHLOROETHENE	12	U	U	1.5	12	UG/L	
	1,1-DICHLOROPROPENE	10	U	U	1.4	10	UG/L	
	1,2,3-TRICHLOROBENZENE	3	U	U	1.5	3	UG/L	
	1,2,3-TRICHLOROPROPANE	32	U	U	1.5	32	UG/L	
	1,2,4-TRICHLOROBENZENE	4	U	U	1.3	4	UG/L	
	1,2,4-TRIMETHYLBENZENE	13	U	U	0.9	13	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	26	U	-	2.5	26	UG/L	
	1,2-DIBROMOETHANE	6	U	U	1.9	6	UG/L	
	1,2-DICHLOROBENZENE	3	U	U	1	3	-UG/L	
	1,2-DICHLOROETHANE	6	U	U	3.3	6	UG/L	
	1,2-DICHLOROPROPANE	4	U	U	0.9	4	UG/L	
	1,3,5-TRIMETHYLBENZENE	5	U	U	1	5	UG/L	
	1,3-DICHLOROBENZENE	12	U	-	0.5	12	UG/L	
	1,3-DICHLOROPROPANE	4	U	U	1.5	4	UG/L	
	1,4-DICHLOROBENZENE	3	U	U	1.2	3	UG/L	
	1-CHLOROHEXANE	5	U	U	1.4	5	UG/L	
	2,2-DICHLOROPROPANE	35	U	U	3.2	35	UG/L	
	2-CHLOROTOLUENE	4	U	U	1	4	UG/L	
	4-BROMOFLUOROBENZENE	99			1	1	ERCEN	
	4-CHLOROTOLUENE	6	U	U	0.8	6	UG/L	
	BENZENE	4	U	U	1	4	UG/L	
	BROMOBENZENE	3	U	U	0.9	3	UG/L	
	BROMOCHLOROMETHANE	4	R	U	1.8	4	UG/L	SSCCV%
	BROMODICHLOROMETHANE	8	U	U	1	8	UG/L	
	BROMOFORM	12	U	U	1.8	12	UG/L	
	BROMOMETHANE	11	R	U	2	11	UG/L	SCVMIS
	CARBON TETRACHLORIDE	21	U	U	1.6	21	UG/L	
	CHLOROBENZENE	4	U	U	1.2	4	UG/L	
	CHLOROETHANE	10	R	U	3	10	UG/L	SCVMIS
	CHLOROFORM	3	U	U	1.5	3	UG/L	
	CHLOROMETHANE	13	R	U	0.9	13	UG/L	SCVMIS
	CIS-1,2-DICHLOROETHENE	31			0.8	12	UG/L	
	CIS-1,3-DICHLOROPROPENE	10	U	U	1.1	10	UG/L	
	DIBROMOCHLOROMETHANE	5	U	U	1.6	5	UG/L	
	DIBROMOFLUOROMETHANE	93			1	1	ERCEN	
	DIBROMOMETHANE	24	U	U	2	24	UG/L	
	DICHLORODIFLUOROMETHANE	10	R	U	3.6	10	UG/L	SCVMIS
	ETHYLBENZENE	6	U	U	1.2	6	UG/L	
	HEXAChLOROBUTADIENE	11	U	U	2	11	UG/L	
	ISOPROPYLBENZENE	5	U	U	1.3	5	UG/L	
	m,p-xylene	13	U	U	2.2	13	UG/L	
	METHYLENE CHLORIDE	6.9	R		2.1	3	UG/L	CV%D

								SSCCV%
METHYLENE CHLORIDE	6.9	R		2.1	3	UG/L		
N-BUTYLBENZENE	11	U	U	1.1	11	UG/L		
N-PROPYLBENZENE	4	U	U	0.9	4	UG/L		
NAPHTHALENE	4	U	U	1.2	4	UG/L		
O-XYLENE	11	U	U	1.3	11	UG/L		
P-ISOPROPYLTOLUENE	12	U	U	0.9	12	UG/L		
SEC-BUTYLBENZENE	13	U	U	1.2	13	UG/L		
STYRENE	4	U	U	1.2	4	UG/L		
TERT-BUTYLBENZENE	14	U	U	1.3	14	UG/L		
TETRACHLOROETHENE	14	U	U	1.7	14	UG/L		
TOLUENE	11	U	U	1.4	11	UG/L		
TOLUENE-D8	99			1	1	ERCEN		
TRANS-1,2-DICHLOROETHENE	47			0.9	6	UG/L		
TRANS-1,3-DICHLOROPROPENE	10	U	U	1.7	10	UG/L		
TRICHLOROETHENE	190			1	10	UG/L		
TRICHLOROFLUOROMETHANE	8	R	U	2.2	8	UG/L	SCVMIS	
VINYL CHLORIDE	3	R	F	1.6	11	UG/L	SCVMIS	

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA024	1,1,1,2-TETRACHLOROETHANE	10	U	U	2.96	10	UG/L	
	1,1,1-TRICHLOROETHANE	16	U	U	2.6	16	UG/L	
	1,1,2,2-TETRACHLOROETHANE	8	U	U	3.4	8	UG/L	
	1,1,2-TRICHLOROETHANE	20	U	U	3.2	20	UG/L	
	1,1-DICHLOROETHANE	8	U	U	2.2	8	UG/L	
	1,1-DICHLOROETHENE	24	U	U	3	24	UG/L	
	1,1-DICHLOROPROPENE	20	U	U	2.8	20	UG/L	
	1,2,3-TRICHLOROBENZENE	6	U	U	3	6	UG/L	
	1,2,3-TRICHLOROPROPANE	64	U	U	3	64	UG/L	
	1,2,4-TRICHLOROBENZENE	8	U	U	2.6	8	UG/L	
	1,2,4-TRIMETHYLBENZENE	26	U	U	1.8	26	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	52	U	U	5	52	UG/L	
	1,2-DIBROMOETHANE	12	U	U	3.8	12	UG/L	
	1,2-DICHLOROBENZENE	6	U	U	2	6	UG/L	
	1,2-DICHLOROETHANE	12	U	U	6.6	12	UG/L	
	1,2-DICHLOROPROPANE	8	U	U	1.8	8	UG/L	
	1,3,5-TRIMETHYLBENZENE	10	U	U	2	10	UG/L	
	1,3-DICHLOROBENZENE	24	U	U	1	24	UG/L	
	1,3-DICHLOROPROPANE	8	U	U	3	8	UG/L	
	1,4-DICHLOROBENZENE	6	U	U	2.4	6	UG/L	
	1-CHLOROHEXANE	10	U	U	2.8	10	UG/L	
	2,2-DICHLOROPROPANE	70	U	U	6.4	70	UG/L	
	2-CHLOROTOLUENE	8	U	U	2	8	UG/L	
	4-BROMOFLUOROBENZENE	95			2	2	ERCEN	
	4-CHLOROTOLUENE	12	U	U	1.6	12	UG/L	
	BENZENE	8	U	U	2	8	UG/L	
	BROMOBENZENE	6	U	U	1.8	6	UG/L	
	BROMOCHLOROMETHANE	8	R	U	3.6	8	UG/L	SSCCV%
	BROMODICHLOROMETHANE	16	U	U	2	16	UG/L	
	BROMOFORM	24	U	U	3.6	24	UG/L	
	BROMOMETHANE	22	R	U	4	22	UG/L	SCVMIS
	CARBON TETRACHLORIDE	42	U	U	3.2	42	UG/L	
	CHLOROBENZENE	8	U	U	2.4	8	UG/L	
	CHLOROETHANE	20	R	U	6	20	UG/L	SCVMIS
	CHLOROFORM	6	U	U	3	6	UG/L	
	CHLOROMETHANE	26	R	U	1.8	26	UG/L	SCVMIS

6521366

9802159 SW8260A

Page 6 of 10

CIS-1,2-DICHLOROETHENE	11	F	F	1 6	24	UG/L	
CIS-1,3-DICHLOROPROPENE	20	U	U	2.2	20	UG/L	
DIBROMOCHLOROMETHANE	10	U	U	3 2	10	UG/L	
DIBROMOFLUOROMETHANE	100			2	2	ERCEN	
DIBROMOMETHANE	48	U	U	4	48	UG/L	
DICHLORODIFLUOROMETHANE	20	R	U	7.2	20	UG/L	SCVMIS
ETHYLBENZENE	12	U	U	2.4	12	UG/L	
HEXACHLOROBUTADIENE	22	U	U	4	22	UG/L	
ISOPROPYLBENZENE	10	U	U	2.6	10	UG/L	
m,p-xylene	26	U	U	4.4	26	UG/L	
METHYLENE CHLORIDE	12	R		4 2	6	UG/L	CV%D
METHYLENE CHLORIDE	12	R		4 2	6	UG/L	SSCCV%
N-BUTYLBENZENE	22	U	U	2.2	22	UG/L	
N-PROPYLBENZENE	8	U	U	1.8	8	UG/L	
NAPHTHALENE	8	U	U	2.4	8	UG/L	
O-XYLENE	22	U	U	2 6	22	UG/L	
P-ISOPROPYLtolUENE	24	U	U	1 8	24	UG/L	
SEC-BUTYLBENZENE	26	U	U	2.4	26	UG/L	
STYRENE	8	U	U	2.4	8	UG/L	
TERT-BUTYLBENZENE	28	U	U	2.6	28	UG/L	
TETRACHLOROETHENE	28	U	U	3.4	28	UG/L	
TOLUENE	22	U	U	2 8	22	UG/L	
TOLUENE-D8	102			2	2	ERCEN	
TRANS-1,2-DICHLOROETHENE	12	U	U	1.8	12	UG/L	
TRANS-1,3-DICHLOROPROPENE	20	U	U	3 4	20	UG/L	
TRICHLOROETHENE	550			2	20	UG/L	
TRICHLOROFLUOROMETHANE	16	R	U	4.4	16	UG/L	SCVMIS
VINYL CHLORIDE	22	R	U	3.2	22	UG/L	SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA025	1,1,1,2-TETRACHLOROETHANE	1	U	U	0.296	1	UG/L	
	1,1,1-TRICHLOROETHANE	1 6	U	U	0.26	1.6	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.8	U	U	0.34	0.8	UG/L	
	1,1,2-TRICHLOROETHANE	2	U	U	0.32	2	UG/L	
	1,1-DICHLOROETHANE	0.8	U	U	0.22	0.8	UG/L	
	1,1-DICHLOROETHENE	2.4	U	U	0.3	2.4	UG/L	
	1,1-DICHLOROPROPENE	2	U	U	0.28	2	UG/L	
	1,2,3-TRICHLOROBENZENE	0.6	U	U	0.3	0.6	UG/L	
	1,2,3-TRICHLOROPROPANE	6.4	U	U	0.3	6.4	UG/L	
	1,2,4-TRICHLOROBENZENE	0.8	U	U	0.26	0.8	UG/L	
	1,2,4-TRIMETHYLBENZENE	2.6	U	U	0.18	2.6	UG/L	
	2-DIBROMO-3-CHLOROPROPAN	5.2	U	U	0.5	5.2	UG/L	
	1,2-DIBROMOETHANE	1.2	U	U	0.38	1.2	UG/L	
	1,2-DICHLOROBENZENE	0.6	U	U	0.2	0.6	UG/L	
	1,2-DICHLOROETHANE	1.2	U	U	0.66	1.2	UG/L	
	1,2-DICHLOROPROPANE	0.8	U	U	0.18	0.8	UG/L	
	1,3,5-TRIMETHYLBENZENE	1	U	U	0.2	1	UG/L	
	1,3-DICHLOROBENZENE	2.4	U	U	0.1	2.4	UG/L	
	1,3-DICHLOROPROPANE	0.8	U	U	0.3	0.8	UG/L	
	1,4-DICHLOROBENZENE	0.6	U	U	0.24	0.6	UG/L	
	1-CHLOROHEXANE	1	U	U	0.28	1	UG/L	
	2,2-DICHLOROPROPANE	7	U	U	0.64	7	UG/L	
	2-CHLOROTOLUENE	0.8	U	U	0.2	0.8	UG/L	
	4-BROMOFLUOROBENZENE	98			0.2	0.2	ERCEN	
	4-CHLOROTOLUENE	1.2	U	U	0.16	1.2	UG/L	

BENZENE	0.8	U	U	0.2	0.8	UG/L	
BROMOBENZENE	0.6	U	U	0.18	0.6	UG/L	
BROMOCHLOROMETHANE	0.8	R	U	0.36	0.8	UG/L	SSCCV%
BROMODICHLOROMETHANE	1.6	U	U	0.2	1.6	UG/L	
BROMOFORM	2.4	U	U	0.36	2.4	UG/L	
BROMOMETHANE	2.2	R	U	0.4	2.2	UG/L	SCVMIS
CARBON TETRACHLORIDE	4.2	U	U	0.32	4.2	UG/L	
CHLOROBENZENE	0.8	U	U	0.24	0.8	UG/L	
CHLOROETHANE	2	R	U	0.6	2	UG/L	SCVMIS
CHLOROFORM	0.6	U	U	0.3	0.6	UG/L	
CHLOROMETHANE	2.6	R	U	0.18	2.6	UG/L	SCVMIS
CIS-1,2-DICHLOROETHENE	1.3	F	F	0.16	2.4	UG/L	
CIS-1,3-DICHLOROPROPENE	2	U	U	0.22	2	UG/L	
DIBROMOCHLOROMETHANE	1	U	U	0.32	1	UG/L	
DIBROMOFLUOROMETHANE	104			0.2	0.2	ERCEN	
DIBROMOMETHANE	4.8	U	U	0.4	4.8	UG/L	
DICHLORODIFLUOROMETHANE	2	R	U	0.72	2	UG/L	SCVMIS
ETHYLBENZENE	1.2	U	U	0.24	1.2	UG/L	
HEXACHLOROBUTADIENE	2.2	U	U	0.4	2.2	UG/L	
ISOPROPYLBENZENE	1	U	U	0.26	1	UG/L	
m,p-xylene	2.6	U	U	0.44	2.6	UG/L	
METHYLENE CHLORIDE	1.6	R	U	0.42	0.6	UG/L	BS%R
METHYLENE CHLORIDE	1.6	R	U	0.42	0.6	UG/L	CV%D
METHYLENE CHLORIDE	1.6	R	U	0.42	0.6	UG/L	BD%R
METHYLENE CHLORIDE	1.6	R	U	0.42	0.6	UG/L	SSCCV%
N-BUTYLBENZENE	2.2	U	U	0.22	2.2	UG/L	
N-PROPYLBENZENE	0.8	U	U	0.18	0.8	UG/L	
NAPHTHALENE	0.8	U	U	0.24	0.8	UG/L	
O-XYLENE	2.2	U	U	0.26	2.2	UG/L	
P-ISOPROPYLtolUENE	2.4	U	U	0.18	2.4	UG/L	
SEC-BUTYLBENZENE	2.6	U	U	0.24	2.6	UG/L	
STYRENE	0.8	U	U	0.24	0.8	UG/L	
TERT-BUTYLBENZENE	2.8	U	U	0.26	2.8	UG/L	
TETRACHLOROETHENE	0.82	F	F	0.34	2.8	UG/L	
TOLUENE	2.2	U	U	0.28	2.2	UG/L	
TOLUENE-D8	102			0.2	0.2	ERCEN	
TRANS-1,2-DICHLOROETHENE	1.2	U	U	0.18	1.2	UG/L	
TRANS-1,3-DICHLOROPROPENE	2	U	U	0.34	2	UG/L	
TRICHLOROETHENE	45			0.2	2	UG/L	
TRICHLOROFLUOROMETHANE	1.6	R	U	0.44	1.6	UG/L	SCVMIS
VINYL CHLORIDE	2.2	R	U	0.32	2.2	UG/L	SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA026	1,1,1,2-TETRACHLOROETHANE	10	U	U	2.96	10	UG/L	
	1,1,1-TRICHLOROETHANE	16	U	U	2.6	16	UG/L	
	1,1,2,2-TETRACHLOROETHANE	8	U	U	3.4	8	UG/L	
	1,1,2-TRICHLOROETHANE	20	U	U	3.2	20	UG/L	
	1,1-DICHLOROETHANE	8	U	U	2.2	8	UG/L	
	1,1-DICHLOROETHENE	24	U	U	3	24	UG/L	
	1,1-DICHLOROPROPENE	20	U	U	2.8	20	UG/L	
	1,2,3-TRICHLOROBENZENE	6	U	U	3	6	UG/L	
	1,2,3-TRICHLOROPROPANE	64	U	U	3	64	UG/L	
	1,2,4-TRICHLOROBENZENE	8	U	U	2.6	8	UG/L	
	1,2,4-TRIMETHYLBENZENE	26	U	U	1.8	26	UG/L	
	2-DIBROMO-3-CHLOROPROPAN	52	U	U	5	52	UG/L	

1,2-DIBROMOETHANE	12	U	U	3.8	12	UG/L
1,2-DICHLOROBENZENE	6	U	U	2	6	UG/L
1,2-DICHLOROETHANE	12	U	U	6.6	12	UG/L
1,2-DICHLOROPROPANE	8	U	U	1.8	8	UG/L
1,3,5-TRIMETHYLBENZENE	10	U	U	2	10	UG/L
1,3-DICHLOROBENZENE	24	U	U	1	24	UG/L
1,3-DICHLOROPROPANE	8	U	U	3	8	UG/L
1,4-DICHLOROBENZENE	6	U	U	2.4	6	UG/L
1-CHLOROHEXANE	10	U	U	2.8	10	UG/L
2,2-DICHLOROPROPANE	70	U	U	6.4	70	UG/L
2-CHLOROTOLUENE	8	U	U	2	8	UG/L
4-BROMOFLUOROBENZENE	102			2	2	ERCEN
4-CHLOROTOLUENE	12	U	U	1.6	12	UG/L
BENZENE	8	U	U	2	8	UG/L
BROMOBENZENE	6	U	U	1.8	6	UG/L
BROMOCHLOROMETHANE	8	R	U	3.6	8	UG/L
BROMODICHLOROMETHANE	16	U	U	2	16	UG/L
BROMOFORM	24	U	U	3.6	24	UG/L
BROMOMETHANE	22	R	U	4	22	UG/L
CARBON TETRACHLORIDE	42	U	U	3.2	42	UG/L
CHLOROBENZENE	8	U	U	2.4	8	UG/L
CHLOROETHANE	20	R	U	6	20	UG/L
CHLOROFORM	6	U	U	3	6	UG/L
CHLOROMETHANE	26	R	U	1.8	26	UG/L
CIS-1,2-DICHLOROETHENE	12	F	F	1.6	24	UG/L
CIS-1,3-DICHLOROPROPENE	20	U	U	2.2	20	UG/L
DIBROMOCHLOROMETHANE	10	U	U	3.2	10	UG/L
DIBROMOFLUOROMETHANE	102			2	2	ERCEN
DIBROMOMETHANE	48	U	U	4	48	UG/L
DICHLORODIFLUOROMETHANE	20	R	U	7.2	20	UG/L
ETHYLBENZENE	12	U	U	2.4	12	UG/L
HEXACHLOROBUTADIENE	22	U	U	4	22	UG/L
ISOPROPYLBENZENE	10	U	U	2.6	10	UG/L
m,p-xylene	26	U	U	4.4	26	UG/L
METHYLENE CHLORIDE	12	R		4.2	6	UG/L
METHYLENE CHLORIDE	12	R		4.2	6	UG/L
N-BUTYLBENZENE	22	U	U	2.2	22	UG/L
N-PROPYLBENZENE	8	U	U	1.8	8	UG/L
NAPHTHALENE	8	U	U	2.4	8	UG/L
O-XYLENE	22	U	U	2.6	22	UG/L
P-ISOPROPYLtolUENE	24	U	U	1.8	24	UG/L
SEC-BUTYLBENZENE	26	U	U	2.4	26	UG/L
STYRENE	8	U	U	2.4	8	UG/L
TERT-BUTYLBENZENE	28	U	U	2.6	28	UG/L
TETRACHLOROETHENE	9	F	F	3.4	28	UG/L
TOLUENE	22	U	U	2.8	22	UG/L
TOLUENE-D8	103			2	2	ERCEN
TRANS-1,2-DICHLOROETHENE	12	U	U	1.8	12	UG/L
TRANS-1,3-DICHLOROPROPENE	20	U	U	3.4	20	UG/L
TRICHLOROETHENE	410			2	20	UG/L
TRICHLOROFUOROMETHANE	16	R	U	4.4	16	UG/L
VINYL CHLORIDE	22	R	U	3.2	22	UG/L

SSCCV%

SCVMIS

SCVMIS

SCVMIS

CV%D-

SSCCV%

SCVMIS

SCVMIS

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

6521370

9802159 SW8260A

Page 10 of 10

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria
SCVMISS	Missing target analyte

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria

B = The analyte was found in an associated blank, as well as in the sample

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This placeholder is for calculating QC criteria issues without flagging.

6521371

NAS FW JRB AOC 2

Data Quality Evaluation



SDG 9802168 Method SW8260A
Reviewer mhc Date 5/22/98 Matrix Water
Senior Review Vito D'Aurora

Field Samples

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
-----------------	------------------	-----------------	------------------	-----------------	------------------

Water

AIA027TB1	TB	AIA028EB1	EB	AIA029AB1	AB
AIA030	N	AIA031	N	AIA031MS	MS
AIA031SD	SD	AIA032FD1	FD	AIA033	N
AIA034	N	AIA035	N	AIA036	N
AIA037	N	AIA038	N	LABQC	BD

1. Case Narrative Items of Interest

1. Methylene Chloride was detected > the RL in the method blank. This compound was detected < the calculated value in samples in most of the samples, so the data were flagged U (by the lab). Sample -11 had MeCl detected at the background levels, but MeCl was above the calculated value after dilution factor applied, therefore, it is not flagged U.
2. All LCS/LCD recoveries and RPDs were within acceptance criteria with the exception of Methylene Chloride and n-butylbenzene. The background levels of Methylene chloride detected in this laboratory can cause inconsistent and irreproducible results for low level analyses. N-butylbenzene recoveries are slightly above control limits, this for the LCS/LCSD of 3/2/98 compound was detected in -7 only, therefore, all other data are not affected.
3. Four compounds did not meet MS/MSDs recovery criteria. With the exception of MeCl LCS/LCSD recoveries were within control limits and had high background concentrations in the sample causing the analysis to be outside control limits.
4. Due to the concentration of target analytes, samples were analyzed at a higher dilution.
5. All initial calibration criteria were within acceptance criteria. Method SW8260B states any compound exceeding 15% RSD criteria should be analyzed with a higher order curve such as a quadratic. We quantitated these compounds using the average response factor due to a software programming problem associated with Hewlett-Packard MSDs. The manufacturer is now aware of the problem and is working on a solution.

6521372

9802168 SW8260A

Page 2 of 20

2. Blank Summary

- | | |
|----------------------|--|
| Field Blanks | <ol style="list-style-type: none"> 1. No target analytes detected >RL in either the trip blank or equipment blank. 2. Chloroform was detected in the ambient blank > RL. There was no chloroform detected in any of the samples. |
| Method Blanks | <ol style="list-style-type: none"> 1. Methylene Chloride was detected > the RL in the method blank. This compound was detected < the calculated value in samples in most of the samples, so the data were flagged U (by the lab). Sample -11 had MeCl detected at the background levels, but MeCl was above the calculated value after dilution factor applied, therefore, it is not flagged U. 2. The method blank of 3/2/98 had a TIC detection. |

<u>Blank Type</u>	<u>Blank ID</u>	<u>Analyte</u>	<u>Result</u>	<u>ReportLimit</u>	<u>LabFlag</u>	<u>Units</u>
AB	AIA029AB1	CHLOROFORM	1.5	0.15		UG/L
LB	LABQC	METHYLENE CHLORI	0.57	0.21		UG/L
LB	LABQC	METHYLENE CHLORI	0.8	0.21		UG/L

3. Spikes and Duplicates

Field Duplicates All criteria met.

Laboratory Duplicates None in this SDG

- | | |
|---------------------|--|
| Matrix Spike | <ol style="list-style-type: none"> 1. The MS/MSD for Methylene chloride recovered <LCL. The data was not qualified because it had previously been rejected for a number of reasons. 2. Naphthalene recovered > UCL in the MSD and exceeded the RPD criteria this was not documented in the case narrative. The LCS/LCSD (2/26/98) associated with this MS/MSD met all acceptance criteria and per QAPP guidance no naphthalene data was qualified. |
|---------------------|--|

4. Laboratory Control Sample

1. The LCS/LCD(2/26/98) recovered < LCL for Methylene Chloride, 1,3,5-trimethylbenzene recovered >UCL and N-butylbenzene RPD exceeded criteria. There is no documentation in the case narrative of the 1,3,5-trimethylbenzene or n-butylbenzene exceedance. The Methylene chloride results were J flagged for detects and R flagged for non-detects. The 1,3,5-trimethylbenzene and n-butylbenzene detected results were J flagged and non-detected results were none flagged. Though there is no guidance for LCS RPD flagging was applied because LCS/LCSD was used because no MS/MSD was provided.
2. The LCS/LCSD of 3/2/98 recovered <LCL for MeCl and >UCL for n-butylbenzene. The RPD for naphthalene and 1,2-dibromo-3-chloropropane exceeded criteria and is not documented in the case narrative and the data was not qualified because the is no LCS RPD criteria specified.. The associated MeCl results were J flagged for detects and R flagged for non-detects. The associated n-butylbenzene results were J flagged for detects and none flagged for non-detects.

<u>Matrix</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>Analyte</u>	<u>Recovery</u>	<u>Lower Limit</u>	<u>Upper Limit</u>
WATER	BS	LABQC	1,3,5-TRIMETHYLBENZEN	114	72	112
WATER	BS	LABQC	METHYLENE CHLORIDE	59	75	125
WATER	BD	LABQC	METHYLENE CHLORIDE	54	75	125
WATER	BD	LABQC	METHYLENE CHLORIDE	68	75	125
WATER	BD	LABQC	N-BUTYLBENZENE	126	75	125
WATER	BS	LABQC	METHYLENE CHLORIDE	57	75	125
WATER	BS	LABQC	N-BUTYLBENZENE	126	75	125

5. Surrogates All criteria were met.

6. Tuning and Mass Calibration All criteria met.

7. Internal Standard All internal standard recoveries were within acceptance criteria.

8. Calibration Information

Initial Calibration

1. The initial calibration form 6 included in this data package is for 3/10/98. The 2/24/98 form 6 is missing.
2. Package 9802159 shares the same calibration and the form 6 from this package was used to validate this package.
3. Methylene chloride exceeded the RSD criteria and the associated sample results have been R flagged.

<u>Field ID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation Reason</u>
AIA030	METHYLENE CHLORIDE	R	IC%RSD
AIA031	METHYLENE CHLORIDE	R	IC%RSD
AIA032FD1	METHYLENE CHLORIDE	R	IC%RSD
AIA033	METHYLENE CHLORIDE	R	IC%RSD
AIA034	METHYLENE CHLORIDE	R	IC%RSD
AIA035	METHYLENE CHLORIDE	R	IC%RSD
AIA036	METHYLENE CHLORIDE	R	IC%RSD
AIA037	METHYLENE CHLORIDE	R	IC%RSD
AIA038	METHYLENE CHLORIDE	R	IC%RSD

Continuing Calibration

1. Six compounds were missing from the second source CCV from 2/24/98. Two compounds exceeded 25%D. The associated sample results were validated with an R flag.
2. The CCV of 3/2/98 exceeded three 25%D for three compounds. The associated sample results were validated with an R flag.
3. The CCV of 2/26/98 MeCl exceeded 25%D. The associated sample results were R flagged.

<u>Field ID</u>	<u>LabsampleID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation</u>
AIA030	9802168-4	METHYLENE CHLORIDE	R	CV%D
AIA031	9802168-5	METHYLENE CHLORIDE	R	CV%D
AIA031	9802168-5D	BROMOMETHANE	R	CV%D
AIA031	9802168-5D	1,1CHLORODIFLUOROMETHANE	R	CV%D
AIA031	9802168-5D	METHYLENE CHLORIDE	R	CV%D
AIA032FD1	9802168-6	BROMOMETHANE	R	CV%D
AIA032FD1	9802168-6	1,1CHLORODIFLUOROMETHANE	R	CV%D
AIA032FD1	9802168-6	METHYLENE CHLORIDE	R	CV%D
AIA033	9802168-7	BROMOMETHANE	R	CV%D
AIA033	9802168-7	1,1CHLORODIFLUOROMETHANE	R	CV%D
AIA033	9802168-7	METHYLENE CHLORIDE	R	CV%D
AIA034	9802168-8	METHYLENE CHLORIDE	R	CV%D
AIA035	9802168-9	METHYLENE CHLORIDE	R	CV%D
AIA036	9802168-10	METHYLENE CHLORIDE	R	CV%D
AIA037	9802168-11	BROMOMETHANE	R	CV%D
AIA037	9802168-11	1,1CHLORODIFLUOROMETHANE	R	CV%D
AIA037	9802168-11	METHYLENE CHLORIDE	R	CV%D
AIA038	9802168-12	BROMOMETHANE	R	CV%D
AIA038	9802168-12	1,1CHLORODIFLUOROMETHANE	R	CV%D
AIA038	9802168-12	METHYLENE CHLORIDE	R	CV%D

9. Holding Time

Holding times were met.

10. Summary**General Comments**

1. Methylene Chloride was detected > the RL in the method blank. This compound was detected < the calculated value in samples in most of the samples, so the data were flagged U (by the lab). Sample -11 had MeCl detected at the background levels, but MeCl was above the calculated value after dilution factor applied, therefore, it is not flagged U.
2. The method blank of 3/2/98 had a TIC detection.
3. The LCS/LCD(2/26/98) recovered < LCL for Methylene Chloride. 1,3,5-trimethylbenzene recovered > UCL and n-butylbenzene RPD exceeded criteria. There is no documentation in the case narrative of the 1,3,5-trimethylbenzene or n-butylbenzene exceedance. The Methylene chloride results were J flagged for detects and R flagged for non-detects. 1,3,5-trimethylbenzene and n-butylbenzene detected results were J flagged and non-detected results were none flagged. Though there is no guidance for LCS RPD flagging was applied because LCS/LCSD was used because no MS/MSD was provided.
4. The LCS/LCSD of 3/2/98 recovered <LCL for MeCl and >UCL for n-butylbenzene. The RPD for naphthalene and 1,2-dibromo-3-chloropropane exceeded criteria and is not documented in the case narrative and the data was not qualified because the is no LCS RPD criteria specified. The associated MeCl results were J flagged for detects and R flagged for non-detects. The associated n-butylbenzene results were J flagged for detects and none flagged for non-detects.
5. The MS/MSD for Methylene chloride recovered <LCL. The data was not qualified because it had previously been rejected for a number of reasons.

dics: j

6521375

6. Naphthalene recovered > UCL in the MSD and exceeded the RPD criteria and was not documented in the case narrative. The LCS/LCSD (2/26/98) associated with this MS/MSD met all acceptance criteria and per QAPP guidance no naphthalene data was qualified.
7. The initial calibration form 6 included in this data package is for 3/10/98. The 2/24/98 form 6 is missing.
8. Package 9802159 shares the same initial calibration and the form 6 from this package was used to validate this package.
9. Methylene chloride exceeded the ICAL RSD criteria and the associated sample results have been R flagged.
10. Six compounds were missing from the second source CCV from 2/24/98. Two compounds exceeded 25%D. The associated sample results were validated with an R flag.
11. The CCV of 3/2/98 exceeded 25%D for three compounds. The associated sample results were validated with an R flag.
12. The CCV of 2/26/98 MeCl exceeded 25%D. The associated sample results were R flagged.

Data Package Completeness

1. There are no 1X results for all samples requiring dilution.
2. There is no demonstration of a MDL being completed within 1yr.
3. The form 6 Initial Calibration is for 3/10/98. Missing 2/24/98 ICAL form 6.
4. There is no documentation in the case narrative covering the SSCCV and CCV exceedances or missing analytes.
5. The documentation in the case narrative does not cover all of the LCS/LCSD or MS/MSD exceedances.
6. The LR type edata field was incomplete for the diluted sample.
7. The run log has the incorrect sample ID entered for Data files A0762 thru 6.
8. The edata %recovery for vinyl chloride does not match the hardcopy.
9. All requested analyses completed as defined by the COC and any exception reports.

Forms Review/ Items of Interest

Tentatively Identified Compounds (TICs) were detected in all the samples.

COC Review

All necessary chain of custody procedures were adhered to and the documentation is complete.

6521376

9802168 SW8260A

Page 6 of 20

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA030	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.148	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	U	U	0.16	1	UG/L	
	1,1-DICHLOROETHANE	0.4	U	U	0.11	0.4	UG/L	
	1,1-DICHLOROETHENE	1.2	U	U	0.15	1.2	UG/L	
	1,1-DICHLOROPROPENE	1	U	U	0.14	1	UG/L	
	1,2,3-TRICHLOROBENZENE	0.3	U	U	0.15	0.3	UG/L	
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	U	U	0.13	0.4	UG/L	
	1,2,4-TRIMETHYLBENZENE	1.3	U	U	0.09	1.3	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	2.6	U	U	0.25	2.6	UG/L	
	1,2-DIBROMOETHANE	0.6	U	U	0.19	0.6	UG/L	
	1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
	1,2-DICHLOROETHANE	0.6	U	U	0.33	0.6	UG/L	
	1,2-DICHLOROPROPANE	0.4	U	U	0.09	0.4	UG/L	
	1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
	1,3-DICHLOROPROPANE	0.4	U	U	0.15	0.4	UG/L	
	1,4-DICHLOROBENZENE	0.3	U	U	0.12	0.3	UG/L	
	1-CHLOROHEXANE	0.5	U	U	0.14	0.5	UG/L	
	2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L	
	2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	
	4-BROMOFLUOROBENZENE	98			0.1	0.1	ERCEN	
	- 4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L	
	BENZENE	-0.4	U	U	0.1	0.4	UG/L	
	BROMOBENZENE	0.3	U	U	0.09	0.3	UG/L	
	BROMOCHLOROMETHANE	0.4	R	U	0.18	0.4	UG/L	SSCCV%
	BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L	
	BROMOFORM	1.2	U	U	0.18	1.2	UG/L	
	BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	SCVMIS
	CARBON TETRACHLORIDE	2.1	U	U	0.16	2.1	UG/L	
	CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	
	CHLOROETHANE	1	R	U	0.3	1	UG/L	SCVMIS
	CHLOROFORM	0.3	U	U	0.15	0.3	UG/L	
	CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	SCVMIS
	CIS-1,2-DICHLOROETHENE	1.2	U	U	0.08	1.2	UG/L	
	CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L	
	DIBROMOCHLOROMETHANE	0.5	U	U	0.16	0.5	UG/L	
	DIBROMOFLUOROMETHANE	103			0.1	0.1	ERCEN	
	DIBROMOMETHANE	2.4	U	U	0.2	2.4	UG/L	
	DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L	SCVMIS
	ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L	
	HEXAChLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L	
	ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L	
	m,p-xylene	1.3	U	U	0.22	1.3	UG/L	
	METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BD%R
	METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BS%R

METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	CV%D
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	IC%RSI
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	SSCCV%
N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L	
NAPHTHALENE	0.4	U	U	0.12	0.4	UG/L	
O-XYLENE	1.1	U	U	0.13	1.1	UG/L	
P-ISOPROPYLtolUENE	1.2	U	U	0.09	1.2	UG/L	
SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L	
STYRENE	0.4	U	U	0.12	0.4	UG/L	
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L	
TETRACHLOROETHENE	1.4	U	U	0.17	1.4	UG/L	
TOLUENE	1.1	U	U	0.14	1.1	UG/L	
TOLUENE-D8	103			0.1	0.1	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.6	U	U	0.09	0.6	UG/L	
TRANS-1,3-DICHLOROPROPENE	1	U	U	0.17	1	UG/L	
TRICHLOROETHENE	1	U	U	0.1	1	UG/L	
TRICHLOROFLUOROMETHANE	0.8	R	U	0.22	0.8	UG/L	SCVMIS
VINYL CHLORIDE	11	R	U	0.16	1.1	UG/L	SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA031	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.148	0.5	UG/L	
	1,1,1,2-TETRACHLOROETHANE	2.5	exclude	U	0.74	2.5	UG/L	RE
	1,1,1-TRICHLOROETHANE	4	exclude	U	0.65	4	UG/L	RE
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	
	1,1,2,2-TETRACHLOROETHANE	2	exclude	U	0.85	2	UG/L	RE
	1,1,2-TRICHLOROETHANE	1	U	U	0.16	1	UG/L	
	1,1,2-TRICHLOROETHANE	5	exclude	U	0.8	5	UG/L	RE
	1,1-DICHLOROETHANE	0.4	U	U	0.11	0.4	UG/L	
	1,1-DICHLOROETHANE	2	exclude	U	0.55	2	UG/L	RE
	1,1-DICHLOROETHENE	6	exclude	U	0.75	6	UG/L	RE
	1,1-DICHLOROETHENE	0.42	F	F	0.15	1.2	UG/L	
	1,1-DICHLOROPROPENE	1	U	U	0.14	1	UG/L	
	1,1-DICHLOROPROPENE	5	exclude	U	0.7	5	UG/L	RE
	1,2,3-TRICHLOROBENZENE	0.3	U	U	0.15	0.3	UG/L	
	1,2,3-TRICHLOROBENZENE	1.5	exclude	U	0.75	1.5	UG/L	RE
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
	1,2,3-TRICHLOROPROPANE	16	exclude	U	0.75	16	UG/L	RE
	1,2,4-TRICHLOROBENZENE	0.4	U	U	0.13	0.4	UG/L	
	1,2,4-TRICHLOROBENZENE	2	exclude	U	0.65	2	UG/L	RE
	1,2,4-TRIMETHYLBENZENE	6.5	exclude	U	0.45	6.5	UG/L	RE
	1,2,4-TRIMETHYLBENZENE	1.3	U	U	0.09	1.3	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	2.6	U	U	0.25	2.6	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	13	exclude	U	1.25	13	UG/L	RE
	1,2-DIBROMOETHANE	0.6	U	U	0.19	0.6	UG/L	
	1,2-DIBROMOETHANE	3	exclude	U	0.95	3	UG/L	RE
	1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
	1,2-DICHLOROBENZENE	1.5	exclude	U	0.5	1.5	UG/L	RE
	1,2-DICHLOROETHANE	0.6	U	U	0.33	0.6	UG/L	
	1,2-DICHLOROETHANE	3	exclude	U	1.65	3	UG/L	RE
	1,2-DICHLOROPROPANE	2	exclude	U	0.45	2	UG/L	RE
	1,2-DICHLOROPROPANE	0.4	U	U	0.09	0.4	UG/L	
	1,3,5-TRIMETHYLBENZENE	2.5	exclude	U	0.5	2.5	UG/L	RE
	1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
	1,3-DICHLOROBENZENE	6	exclude	U	0.25	6	UG/L	RE

1,3-DICHLOROPROPANE	0.4	U	U	0.15	0.4	UG/L	
1,3-DICHLOROPROPANE	2	exclude	U	0.75	2	UG/L	RE
1,4-DICHLOROBENZENE	0.3	U	U	0.12	0.3	UG/L	
1,4-DICHLOROBENZENE	1.5	exclude	U	0.6	1.5	UG/L	RE
1-CHLOROHEXANE	0.5	U	U	0.14	0.5	UG/L	
1-CHLOROHEXANE	2.5	exclude	U	0.7	2.5	UG/L	RE
2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L	
2,2-DICHLOROPROPANE	18	exclude	U	1.6	18	UG/L	RE
2-CHLOROTOLUENE	2	exclude	U	0.5	2	UG/L	RE
2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	
4-BROMOFLUOROBENZENE	96			0.5	0.5	ERCEN	
4-BROMOFLUOROBENZENE	98			0.1	0.1	ERCEN	
4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L	
4-CHLOROTOLUENE	3	exclude	U	0.4	3	UG/L	RE
BENZENE	0.4	U	U	0.1	0.4	UG/L	
BENZENE	2	exclude	U	0.5	2	UG/L	RE
BROMOBENZENE	1.5	exclude	U	-0.45	1.5	UG/L	RE
BROMOBENZENE	0.3	U	U	0.09	0.3	UG/L	
BROMOCHLOROMETHANE	0.4	R	U	0.18	0.4	UG/L	SSCCV%
BROMOCHLOROMETHANE	2	exclude	U	0.9	2	UG/L	RE
BROMODICHLOROMETHANE	4	exclude	U	0.5	4	UG/L	RE
BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L	
BROMOFORM	1.2	U	U	0.18	1.2	UG/L	
BROMOFORM	6	exclude	U	0.9	6	UG/L	RE
BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	SCVMIS
BROMOMETHANE	5.5	exclude	U	1	5.5	UG/L	RE
CARBON TETRACHLORIDE	21	U	U	0.16	2.1	UG/L	
CARBON TETRACHLORIDE	11	exclude	U	0.8	11	UG/L	RE
CHLOROBENZENE	2	exclude	U	0.6	2	UG/L	RE
CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	
CHLOROETHANE	1	R	U	0.3	1	UG/L	SCVMIS
CHLOROETHANE	5	exclude	U	1.5	5	UG/L	RE
CHLOROFORM	0.3	U	U	0.15	0.3	UG/L	
CHLOROFORM	1.5	exclude	U	0.75	1.5	UG/L	RE
CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	SCVMIS
CHLOROMETHANE	6.5	exclude	U	0.45	6.5	UG/L	RE
CIS-1,2-DICHLOROETHENE	80	exclude	E	0.08	1.2	UG/L	RE
CIS-1,2-DICHLOROETHENE	84			0.4	6	UG/L	
CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L	
CIS-1,3-DICHLOROPROPENE	5	exclude	U	0.55	5	UG/L	RE
DIBROMOCHLOROMETHANE	2.5	exclude	U	0.8	2.5	UG/L	RE
DIBROMOCHLOROMETHANE	0.5	U	U	0.16	0.5	UG/L	
DIBROMOFLUOROMETHANE	97			0.5	0.5	ERCEN	
DIBROMOFLUOROMETHANE	105			0.1	0.1	ERCEN	
DIBROMOMETHANE	2.4	U	U	0.2	2.4	UG/L	
DIBROMOMETHANE	12	exclude	U	1	12	UG/L	RE
DICHLORODIFLUOROMETHANI	1	R	U	0.36	1	UG/L	SCVMIS
DICHLORODIFLUOROMETHANI	5	exclude	U	1.8	5	UG/L	RE
ETHYLBENZENE	3	exclude	U	0.6	3	UG/L	RE
ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L	
HEXAChLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L	
HEXAChLOROBUTADIENE	5.5	exclude	U	1	5.5	UG/L	RE
ISOPROPYLBENZENE	2.5	exclude	U	0.65	2.5	UG/L	RE
ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L	
m,p-xylene	1.3	U	U	0.22	1.3	UG/L	
m,p-xylene	6.5	exclude	U	1.1	6.5	UG/L	RE

METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	SSCCV%
METHYLENE CHLORIDE	5.9	exclude	U	1.05	1.5	UG/L	RE
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BD%R
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	CV%D
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	IC%RSI
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BS%R
N-BUTYLBENZENE	5.5	exclude	U	0.55	5.5	UG/L	RE
N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L	
N-PROPYLBENZENE	2	exclude	U	0.45	2	UG/L	RE
NAPHTHALENE	0.4	U	U	0.12	0.4	UG/L	
NAPHTHALENE	2	exclude	U	0.6	2	UG/L	RE
O-XYLENE	1.1	U	U	0.13	1.1	UG/L	
O-XYLENE	5.5	exclude	U	0.65	5.5	UG/L	RE
P-ISOPROPYLTOLUENE	6	exclude	U	0.45	6	UG/L	RE
P-ISOPROPYLTOLUENE	1.2	U	U	0.09	1.2	UG/L	
SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L	
SEC-BUTYLBENZENE	6.5	exclude	U	0.6	6.5	UG/L	RE
STYRENE	0.4	U	U	0.12	0.4	UG/L	
STYRENE	2	exclude	U	0.6	2	UG/L	RE
TERT-BUTYLBENZENE	7	exclude	U	0.65	7	UG/L	RE
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L	
TETRACHLOROETHENE	1.4	U	U	0.17	1.4	UG/L	
TETRACHLOROETHENE	7	exclude	U	0.85	7	UG/L	RE
TOLUENE	1.1	U	U	0.14	1.1	UG/L	
TOLUENE	5.5	exclude	U	0.7	5.5	UG/L	RE
TOLUENE-D8	102			0.1	0.1	ERCEN	
TOLUENE-D8	98			0.5	0.5	ERCEN	
TRANS-1,2-DICHLOROETHENE	130			0.45	3	UG/L	
TRANS-1,2-DICHLOROETHENE	120	exclude	E	0.09	0.6	UG/L	RE
TRANS-1,3-DICHLOROPROPENE	5	exclude	U	0.85	5	UG/L	RE
TRANS-1,3-DICHLOROPROPENE	1	U	U	0.17	1	UG/L	
TRICHLOROETHENE	35	exclude		0.5	5	UG/L	RE
TRICHLOROETHENE	33			0.1	1	UG/L	
TRICHLOROFLUOROMETHANE	4	exclude	U	1.1	4	UG/L	RE
TRICHLOROFLUOROMETHANE	0.8	R	U	0.22	0.8	UG/L	SCVMIS
VINYL CHLORIDE	2.5	exclude	F	0.8	5.5	UG/L	RE
VINYL CHLORIDE	2.6	R		0.16	1.1	UG/L	SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA032FD1	1,1,1,2-TETRACHLOROETHANE	2.5	U	U	0.74	2.5	UG/L	
	1,1,1-TRICHLOROETHANE	4	U	U	0.65	4	UG/L	
	1,1,2,2-TETRACHLOROETHANE	2	U	U	0.85	2	UG/L	
	1,1,2-TRICHLOROETHANE	5	U	U	0.8	5	UG/L	
	1,1-DICHLOROETHANE	2	U	U	0.55	2	UG/L	
	1,1-DICHLOROETHENE	6	U	U	0.75	6	UG/L	
	1,1-DICHLOROPROPENE	5	U	U	0.7	5	UG/L	
	1,2,3-TRICHLOROBENZENE	1.5	U	U	0.75	1.5	UG/L	
	1,2,3-TRICHLOROPROPANE	16	U	U	0.75	16	UG/L	
	1,2,4-TRICHLOROBENZENE	2	U	U	0.65	2	UG/L	
	1,2,4-TRIMETHYLBENZENE	6.5	U	U	0.45	6.5	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	13	U	U	1.25	13	UG/L	
	1,2-DIBROMOETHANE	3	U	U	0.95	3	UG/L	
	1,2-DICHLOROBENZENE	1.5	U	U	0.5	1.5	UG/L	
	1,2-DICHLOROETHANE	3	U	U	1.65	3	UG/L	
	1,2-DICHLOROPROPANE	2	U	U	0.45	2	UG/L	

6521380

9802168 SW8260A

Page 10 of 20

1,3,5-TRIMETHYLBENZENE	2.5	U	U	0.5	2.5	UG/L	
1,3-DICHLOROBENZENE	6	U	U	0.25	6	UG/L	
1,3-DICHLOROPROPANE	2	U	U	0.75	2	UG/L	
1,4-DICHLOROBENZENE	1.5	U	U	0.6	1.5	UG/L	
1-CHLOROHEXANE	2.5	U	U	0.7	2.5	UG/L	
2,2-DICHLOROPROPANE	18	U	U	1.6	18	UG/L	
2-CHLOROTOLUENE	2	U	U	0.5	2	UG/L	
4-BROMOFLUOROBENZENE	96			0.5	0.5	ERCEN	
4-CHLOROTOLUENE	3	U	U	0.4	3	UG/L	
BENZENE	2	U	U	0.5	2	UG/L	
BROMOBENZENE	15	U	U	0.45	1.5	UG/L	
BROMOCHLOROMETHANE	2	R	U	0.9	2	UG/L	SSCCV%
BROMODICHLOROMETHANE	4	U	U	0.5	4	UG/L	
BROMOFORM	6	U	U	0.9	6	UG/L	
BROMOMETHANE	5.5	R	U	1	5.5	UG/L	CV%D
BROMOMETHANE	5.5	R	U	1	5.5	UG/L	SCVMIS
CARBON TETRACHLORIDE	11	U	U	0.8	11	UG/L	
CHLOROBENZENE	2	U	U	0.6	2	UG/L	
CHLOROETHANE	5	R	U	1.5	5	UG/L	SCVMIS
CHLOROFORM	15	U	U	0.75	1.5	UG/L	
CHLOROMETHANE	6.5	R	U	0.45	6.5	UG/L	SCVMIS
CIS-1,2-DICHLOROETHENE	75			0.4	6	UG/L	
CIS-1,3-DICHLOROPROPENE	5	U	U	0.55	5	UG/L	
DIBROMOCHLOROMETHANE	2.5	U	U	0.8	2.5	UG/L	
DIBROMOFLUOROMETHANE	102			0.5	0.5	ERCEN	
DIBROMOMETHANE	12	U	U	1	12	UG/L	
DICHLORODIFLUOROMETHANE	5	R	U	1.8	—	5	UG/L
DICHLORODIFLUOROMETHANE	5	R	U	1.8	—	5	UG/L
ETHYLBENZENE	3	U	U	0.6	3	UG/L	SCVMIS
HEXAChLOROBUTADIENE	5.5	U	U	1	5.5	UG/L	
ISOPROPYLBENZENE	2.5	U	U	0.65	2.5	UG/L	
m,p-xylene	6.5	U	U	1.1	6.5	UG/L	
METHYLENE CHLORIDE	2.2	R	U	1.05	1.5	UG/L	SSCCV%
METHYLENE CHLORIDE	2.2	R	U	1.05	1.5	UG/L	IC%RSI
METHYLENE CHLORIDE	2.2	R	U	1.05	1.5	UG/L	CV%D
METHYLENE CHLORIDE	2.2	R	U	1.05	1.5	UG/L	BD%R
METHYLENE CHLORIDE	2.2	R	U	1.05	1.5	UG/L	BS%R
N-PROPYLBENZENE	2	U	U	0.45	2	UG/L	
NAPHTHALENE	2	U	U	0.6	2	UG/L	
O-XYLENE	5.5	U	U	0.65	5.5	UG/L	
P-ISOPROPYLtolUENE	6	U	U	0.45	6	UG/L	
SEC-BUTYLBENZENE	6.5	U	U	0.6	6.5	UG/L	
STYRENE	2	U	U	0.6	2	UG/L	
TERT-BUTYLBENZENE	7	U	U	0.65	7	UG/L	
TETRAChLOROETHENE	7	U	U	0.85	7	UG/L	
TOLUENE	5.5	U	U	0.7	5.5	UG/L	
TOLUENE-D8	100			0.5	0.5	ERCEN	
TRANS-1,2-DICHLOROETHENE	120			0.45	3	UG/L	
TRANS-1,3-DICHLOROPROPENE	5	U	U	0.85	5	UG/L	
TRICHLOROETHENE	29			0.5	5	UG/L	
TRICHLOROFUOROMETHANE	4	R	U	1.1	4	UG/L	SCVMIS
VINYL CHLORIDE	2.3	R	F	0.8	5.5	UG/L	SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA033	1,1,1,2-TETRAChLOROETHANE	1	U	U	0.296	1	UG/L	

6521381

1,1,1-TRICHLOROETHANE	1.6	U	U	0.26	1.6	UG/L
1,1,2-TETRACHLOROETHANE	0.8	U	U	0.34	0.8	UG/L
1,1,2-TRICHLOROETHANE	2	U	U	0.32	2	UG/L
1,1-DICHLOROETHANE	0.8	U	U	0.22	0.8	UG/L
1,1-DICHLOROETHENE	2.4	U	U	0.3	2.4	UG/L
1,1-DICHLOROPROPENE	2	U	U	0.28	2	UG/L
1,2,3-TRICHLOROBENZENE	0.6	U	U	0.3	0.6	UG/L
1,2,3-TRICHLOROPROPANE	6.4	U	U	0.3	6.4	UG/L
1,2,4-TRICHLOROBENZENE	0.8	U	U	0.26	0.8	UG/L
1,2,4-TRIMETHYLBENZENE	2.6	U	U	0.18	2.6	UG/L
2-DIBROMO-3-CHLOROPROPANE	5.2	U	U	0.5	5.2	UG/L
1,2-DIBROMOETHANE	1.2	U	U	0.38	1.2	UG/L
1,2-DICHLOROBENZENE	0.6	U	U	0.2	0.6	UG/L
1,2-DICHLOROETHANE	1.2	U	U	0.66	1.2	UG/L
1,2-DICHLOROPROPANE	0.8	U	U	0.18	0.8	UG/L
1,3,5-TRIMETHYLBENZENE	1	U	U	0.2	1	UG/L
1,3-DICHLOROBENZENE	2.4	U	U	0.1	2.4	UG/L
1,3-DICHLOROPROPANE	0.8	U	U	0.3	0.8	UG/L
1,4-DICHLOROBENZENE	0.6	U	U	0.24	0.6	UG/L
1-CHLOROHEXANE	1	U	U	0.28	1	UG/L
2,2-DICHLOROPROPANE	7	U	U	0.64	7	UG/L
2-CHLOROTOLUENE	0.8	U	U	0.2	0.8	UG/L
4-BROMOFLUOROBENZENE	105			0.2	0.2	ERCEN
4-CHLOROTOLUENE	1.2	U	U	0.16	1.2	UG/L
BENZENE	0.8	U	U	0.2	0.8	UG/L
BROMOBENZENE	0.6	U	U	0.18	0.6	UG/L
BROMOCHLOROMETHANE	0.8	R	U	0.36	0.8	UG/L
BROMODICHLOROMETHANE	1.6	U	U	0.2	1.6	UG/L
BROMOFORM	2.4	U	U	0.36	2.4	UG/L
BROMOMETHANE	2.2	R	U	0.4	2.2	UG/L
BROMOMETHANE	2.2	R	U	0.4	2.2	UG/L
CARBON TETRACHLORIDE	4.2	U	U	0.32	4.2	UG/L
CHLOROBENZENE	0.8	U	U	0.24	0.8	UG/L
CHLOROETHANE	2	R	U	0.6	2	UG/L
CHLOROFORM	0.6	U	U	0.3	0.6	UG/L
CHLOROMETHANE	2.6	R	U	0.18	2.6	UG/L
CIS-1,2-DICHLOROETHENE	2.4	U	U	0.16	2.4	UG/L
CIS-1,3-DICHLOROPROPENE	2	U	U	0.22	2	UG/L
DIBROMOCHLOROMETHANE	1	U	U	0.32	1	UG/L
DIBROMOFLUOROMETHANE	102			0.2	0.2	ERCEN
DIBROMOMETHANE	4.8	U	U	0.4	4.8	UG/L
DICHLORODIFLUOROMETHANE	2	R	U	0.72	2	UG/L
DICHLORODIFLUOROMETHANE	2	R	U	0.72	2	UG/L
- ETHYLBENZENE	1.2	U	U	0.24	1.2	UG/L
HEXACHLOROBUTADIENE	2.2	U	U	0.4	2.2	UG/L
ISOPROPYLBENZENE	44			0.26	1	UG/L
m,p-xylene	2.6	U	U	0.44	2.6	UG/L
METHYLENE CHLORIDE	0.62	R	U	0.42	0.6	UG/L
METHYLENE CHLORIDE	0.62	R	U	0.42	0.6	UG/L
METHYLENE CHLORIDE	0.62	R	U	0.42	0.6	UG/L
METHYLENE CHLORIDE	0.62	R	U	0.42	0.6	UG/L
METHYLENE CHLORIDE	0.62	R	U	0.42	0.6	UG/L
N-BUTYLBENZENE	7.6	J		0.22	2.2	UG/L
N-BUTYLBENZENE	7.6	J		0.22	2.2	UG/L
N-PROPYLBENZENE	50			0.18	0.8	UG/L
NAPHTHALENE	74			0.24	0.8	UG/L

6521382

9802168 SW8260A

Page 12 of 20

O-XYLENE	2.2	U	U	0.26	2.2	UG/L	
P-ISOPROPYLtolUENE	2.4	U	U	0.18	2.4	UG/L	
SEC-BUTYLBENZENE	17			0.24	2.6	UG/L	
STYRENE	0.8	U	U	0.24	0.8	UG/L	
TERT-BUTYLBENZENE	3.5			0.26	2.8	UG/L	
TETRACHLOROETHENE	2.8	U	U	0.34	2.8	UG/L	
TOLUENE	2.2	U	U	0.28	2.2	UG/L	
TOLUENE-D8	89			0.2	0.2	ERCEN	
TRANS-1,2-DICHLOROETHENE	1.2	U	U	0.18	1.2	UG/L	
TRANS-1,3-DICHLOROPROPENE	2	U	U	0.34	2	UG/L	
TRICHLOROETHENE	2	U	U	0.2	2	UG/L	
TRICHLOROFLUOROMETHANE	1.6	R	U	0.44	1.6	UG/L	SCVMIS
VINYL CHLORIDE	2.2	R	U	0.32	2.2	UG/L	SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA034	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.148	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	U	U	0.16	1	UG/L	
	1,1-DICHLOROETHANE	0.4	U	U	0.11	0.4	UG/L	
	1,1-DICHLOROETHENE	1.2	U	U	0.15	1.2	UG/L	
	1,1-DICHLOROPROPENE	1	U	U	0.14	1	UG/L	
	1,2,3-TRICHLOROBENZENE	0.3	U	U	0.15	0.3	UG/L	
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	U	U	0.13	0.4	UG/L	
	1,2,4-TRIMETHYLBENZENE	1.3	U	U	0.09	1.3	UG/L	
	2-DIBROMO-3-CHLOROPROPAN	2.6	U	U	0.25	2.6	UG/L	
	1,2-DIBROMOETHANE	0.6	U	U	0.19	0.6	UG/L	
	1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
	1,2-DICHLOROETHANE	0.6	U	U	0.33	0.6	UG/L	
	1,2-DICHLOROPROPANE	0.4	U	U	0.09	0.4	UG/L	
	1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
	1,3-DICHLOROPROPANE	0.4	U	U	0.15	0.4	UG/L	
	1,4-DICHLOROBENZENE	0.3	U	U	0.12	0.3	UG/L	
	1-CHLOROHEXANE	0.5	U	U	0.14	0.5	UG/L	
	2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L	
	2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	
	4-BROMOFLUOROBENZENE	96			0.1	0.1	ERCEN	
	4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L	
	BENZENE	0.4	U	U	0.1	0.4	UG/L	
	BROMOBENZENE	0.3	U	U	0.09	0.3	UG/L	
	BROMOCHLOROMETHANE	0.4	R	U	0.18	0.4	UG/L	SSCCV%
	BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L	
	BROMOFORM	1.2	U	U	0.18	1.2	UG/L	
	BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	SCVMIS
	CARBON TETRACHLORIDE	2.1	U	U	0.16	2.1	UG/L	
	CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	
	CHLOROETHANE	1	R	U	0.3	1	UG/L	SCVMIS
	CHLOROFORM	0.3	U	U	0.15	0.3	UG/L	
	CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	SCVMIS
	CIS-1,2-DICHLOROETHENE	1.2	U	U	0.08	1.2	UG/L	
	CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L	
	DIBROMOCHLOROMETHANE	0.5	U	U	0.16	0.5	UG/L	
	DIBROMOFLUOROMETHANE	102			0.1	0.1	ERCEN	
	DIBROMOMETHANE	2.4	U	U	0.2	2.4	UG/L	

11013

6521383

DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L	SCVMIS
ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L	
HEXACHLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L	
ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L	
m,p-xylene	1.3	U	U	0.22	1.3	UG/L	
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	CV%D
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	IC%RSI
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	SSCCV%
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BS%R
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BD%R
N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L	
NAPHTHALENE	1.1			0.12	0.4	UG/L	
O-XYLENE	1.1	U	U	0.13	1.1	UG/L	
P-ISOPROPYL TOLUENE	1.2	U	U	0.09	1.2	UG/L	
SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L	
STYRENE	0.4	U	U	0.12	0.4	UG/L	
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L	
TETRACHLOROETHENE	1.4	U	U	0.17	1.4	UG/L	
TOLUENE	1.1	U	U	0.14	1.1	UG/L	
TOLUENE-D8	100			0.1	0.1	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.6	U	U	0.09	0.6	UG/L	
TRANS-1,3-DICHLOROPROPENE	1	U	U	0.17	1	UG/L	
TRICHLOROETHENE	1	U	U	0.1	1	UG/L	
TRICHLOROFLUOROMETHANE	0.8	R	U	0.22	0.8	UG/L	SCVMIS
VINYL CHLORIDE	1.1	R	U	0.16	1.1	UG/L	SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA035	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.148	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	U	U	0.16	1	UG/L	
	1,1-DICHLOROETHANE	0.4	U	U	0.11	0.4	UG/L	
	1,1-DICHLOROETHENE	1.2	U	U	0.15	1.2	UG/L	
	1,1-DICHLOROPROPENE	1	U	U	0.14	1	UG/L	
	1,2,3-TRICHLOROBENZENE	0.3	U	U	0.15	0.3	UG/L	
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	U	U	0.13	0.4	UG/L	
	1,2,4-TRIMETHYLBENZENE	1.3	U	U	0.09	1.3	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	2.6	U	U	0.25	2.6	UG/L	
	1,2-DIBROMOETHANE	0.6	U	U	0.19	0.6	UG/L	
	1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
	1,2-DICHLOROETHANE	0.6	U	U	0.33	0.6	UG/L	
	1,2-DICHLOROPROPANE	0.4	U	U	0.09	0.4	UG/L	
	1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
	1,3-DICHLOROPROPANE	0.4	U	U	0.15	0.4	UG/L	
	1,4-DICHLOROBENZENE	0.3	U	U	0.12	0.3	UG/L	
	1-CHLOROHEXANE	0.5	U	U	0.14	0.5	UG/L	
	2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L	
	2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	
	4-BROMOFLUOROBENZENE	103			0.1	0.1	ERCEN	
	4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L	
	BENZENE	0.4	U	U	0.1	0.4	UG/L	
	BROMOBENZENE	0.3	U	U	0.09	0.3	UG/L	
	BROMOCHLOROMETHANE	0.4	R	U	0.18	0.4	UG/L	SSCCV%
	BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L	

6521384

9802168 SW8260A

Page 14 of 20

BROMOFORM	1.2	U	U	0.18	1.2	UG/L	
BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	SCVMIS
CARBON TETRACHLORIDE	2.1	U	U	0.16	2.1	UG/L	
CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	
CHLOROETHANE	1	R	U	0.3	1	UG/L	SCVMIS
CHLOROFORM	0.3	U	U	0.15	0.3	UG/L	
CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	SCVMIS
CIS-1,2-DICHLOROETHENE	1.2	U	U	0.08	1.2	UG/L	
CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L	
DIBROMOCHLOROMETHANE	0.5	U	U	0.16	0.5	UG/L	
DIBROMOFLUOROMETHANE	104			0.1	0.1	ERCEN	
DIBROMOMETHANE	2.4	U	U	0.2	2.4	UG/L	
DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L	SCVMIS
ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L	
HEXACHLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L	
ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L	
m,p-xylene	1.3	U	U	0.22	1.3	UG/L	
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BS%R
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	CV%D
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	IC%RSI
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	SSCCV%
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BD%R
N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L	
NAPHTHALENE	0.4	U	U	0.12	0.4	UG/L	
O-XYLENE	1.1	U	U	0.13	1.1	UG/L	
P-ISOPROPYLtolUENE	1.2	U	U	0.09	1.2	UG/L	
SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L	
STYRENE	0.4	U	U	0.12	0.4	UG/L	
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L	
TETRACHLOROETHENE	1.4	U	U	0.17	1.4	UG/L	
TOLUENE	1.1	U	U	0.14	1.1	UG/L	
TOLUENE-D8	99			0.1	0.1	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.6	U	U	0.09	0.6	UG/L	
TRANS-1,3-DICHLOROPROPENE	1	U	U	0.17	1	UG/L	
TRICHLOROETHENE	1	U	U	0.1	1	UG/L	
TRICHLOROFLUOROMETHANE	0.8	R	U	0.22	0.8	UG/L	SCVMIS
VINYL CHLORIDE	1.1	R	U	0.16	1.1	UG/L	SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA036	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.148	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	U	U	0.16	1	UG/L	
	1,1-DICHLOROETHANE	0.4	U	U	0.11	0.4	UG/L	
	1,1-DICHLOROETHENE	1.2	U	U	0.15	1.2	UG/L	
	1,1-DICHLOROPROPENE	1	U	U	0.14	1	UG/L	
	1,2,3-TRICHLOROBENZENE	0.3	U	U	0.15	0.3	UG/L	
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	U	U	0.13	0.4	UG/L	
	1,2,4-TRIMETHYLBENZENE	1.3	U	U	0.09	1.3	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	2.6	U	U	0.25	2.6	UG/L	
	1,2-DIBROMOETHANE	0.6	U	U	0.19	0.6	UG/L	
	1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
	1,2-DICHLOROETHANE	0.6	U	U	0.33	0.6	UG/L	
	1,2-DICHLOROPROPANE	0.4	U	U	0.09	0.4	UG/L	

1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
1,3-DICHLOROPROPANE	0.4	U	U	0.15	0.4	UG/L	
1,4-DICHLOROBENZENE	0.3	U	U	0.12	0.3	UG/L	
1-CHLOROHEXANE	0.5	U	U	0.14	0.5	UG/L	
2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L	
2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	
4-BROMOFLUOROBENZENE	100			0.1	0.1	ERCEN	
4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L	
BENZENE	0.4	U	U	0.1	0.4	UG/L	
BROMOBENZENE	0.3	U	U	0.09	0.3	UG/L	
BROMOCHLOROMETHANE	0.4	R	U	0.18	0.4	UG/L	SSCCV%
BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L	
BROMOFORM	1.2	U	U	0.18	1.2	UG/L	
BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	SCVMIS
CARBON TETRACHLORIDE	2.1	U	U	0.16	2.1	UG/L	
CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	
CHLOROETHANE	1	R	U	0.3	1	UG/L	
CHLOROFORM	0.3	U	U	0.15	0.3	UG/L	
CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	SCVMIS
CIS-1,2-DICHLOROETHENE	1.2	U	U	0.08	1.2	UG/L	
CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L	
DIBROMOCHLOROMETHANE	0.5	U	U	0.16	0.5	UG/L	
DIBROMOFLUOROMETHANE	105			0.1	0.1	ERCEN	
DIBROMOMETHANE	2.4	U	U	0.2	2.4	UG/L	
DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L	SCVMIS
ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L	
HEXAChLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L	
ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L	
m,p-xylene	1.3	U	U	0.22	1.3	UG/L	
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	CV%D
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	IC%RSI
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	SSCCV%
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BS%R
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BD%R
N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L	
NAPHTHALENE	0.4	U	U	0.12	0.4	UG/L	
O-XYLENE	1.1	U	U	0.13	1.1	UG/L	
P-ISOPROPYLTOluENE	1.2	U	U	0.09	1.2	UG/L	
SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L	
STYRENE	0.4	U	U	0.12	0.4	UG/L	
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L	
TETRACHLOROETHENE	1.4	U	U	0.17	1.4	UG/L	
TOLUENE	1.1	U	U	0.14	1.1	UG/L	
TOLUENE-D8	98			0.1	0.1	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.6	U	U	0.09	0.6	UG/L	
TRANS-1,3-DICHLOROPROPENE	1	U	U	0.17	1	UG/L	
TRICHLOROETHENE	1.1			0.1	1	UG/L	
TRICHLOROFLUOROMETHANE	0.8	R	U	0.22	0.8	UG/L	SCVMIS
VINYL CHLORIDE	1.1	R	U	0.16	1.1	UG/L	SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA037	1,1,1,2-TETRACHLOROETHANE	5	U	U	1.48	5	UG/L	
	1,1,1-TRICHLOROETHANE	8	U	U	1.3	8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	4	U	U	1.7	4	UG/L	
	1,1,2-TRICHLOROETHANE	10	U	U	1.6	10	UG/L	

6521386

9802168 SW8260A

Page 16 of 20

I,1-DICHLOROETHANE	4	U	U	1.1	4	UG/L
I,1-DICHLOROETHENE	12	U	U	1.5	12	UG/L
I,1-DICHLOROPROPENE	10	U	U	1.4	10	UG/L
1,2,3-TRICHLOROBENZENE	3	U	U	1.5	3	UG/L
1,2,3-TRICHLOROPROPANE	32	U	U	1.5	32	UG/L
1,2,4-TRICHLOROBENZENE	4	U	U	1.3	4	UG/L
1,2,4-TRIMETHYLBENZENE	13	U	U	0.9	13	UG/L
2-DIBROMO-3-CHLOROPROPANE	26	U	U	2.5	26	UG/L
1,2-DIBROMOETHANE	6	U	U	1.9	6	UG/L
1,2-DICHLOROBENZENE	3	U	U	1	3	UG/L
1,2-DICHLOROETHANE	6	U	U	3.3	6	UG/L
1,2-DICHLOROPROPANE	4	U	U	0.9	4	UG/L
1,3,5-TRIMETHYLBENZENE	5	U	U	1	5	UG/L
1,3-DICHLOROBENZENE	12	U	U	0.5	12	UG/L
1,3-DICHLOROPROPANE	4	U	U	1.5	4	UG/L
1,4-DICHLOROBENZENE	3	U	U	1.2	3	UG/L
1-CHLOROHEXANE	5	U	U	1.4	5	UG/L
2,2-DICHLOROPROPANE	35	U	U	3.2	35	UG/L
2-CHLOROTOLUENE	4	U	U	1	4	UG/L
4-BROMOFLUOROBENZENE	98			1	1	ERCEN
4-CHLOROTOLUENE	6	U	U	0.8	6	UG/L
BENZENE	4	U	U	1	4	UG/L
BROMOBENZENE	3	U	U	0.9	3	UG/L
BROMOCHLOROMETHANE	4	R	U	1.8	4	UG/L
BROMODICHLOROMETHANE	8	U	U	1	8	UG/L
BROMOFORM	12	U	U	1.8	12	UG/L
BROMOMETHANE	11	R	U	2	11	UG/L
BROMOMETHANE	11	R	U	2	11	UG/L
CARBON TETRACHLORIDE	21	U	U	1.6	21	UG/L
CHLOROBENZENE	4	U	U	1.2	4	UG/L
CHLOROETHANE	10	R	U	3	10	UG/L
CHLOROFORM	3	U	U	1.5	3	UG/L
CHLOROMETHANE	13	R	U	0.9	13	UG/L
CIS-1,2-DICHLOROETHENE	31	F	F	0.8	12	UG/L
CIS-1,3-DICHLOROPROPENE	10	U	U	1.1	10	UG/L
DIBROMOCHLOROMETHANE	5	U	U	1.6	5	UG/L
DIBROMOFLUOROMETHANE	101			1	1	ERCEN
DIBROMOMETHANE	24	U	U	2	24	UG/L
DICHLORODIFLUOROMETHANE	10	R	U	3.6	10	UG/L
DICHLORODIFLUOROMETHANE	10	R	U	3.6	10	UG/L
ETHYLBENZENE	6	U	U	1.2	6	UG/L
HEXAChLOROBUTADIENE	11	U	U	2	11	UG/L
ISOPROPYLBENZENE	5	U	U	1.3	5	UG/L
m,p-xylene	13	U	U	2.2	13	UG/L
METHYLENE CHLORIDE	8.7	R		2.1	3	UG/L
METHYLENE CHLORIDE	8.7	R		2.1	3	UG/L
METHYLENE CHLORIDE	8.7	R		2.1	3	UG/L
N-PROPYLBENZENE	4	U	U	0.9	4	UG/L
NAPHTHALENE	6.2			1.2	4	UG/L
O-XYLENE	11	U	U	1.3	11	UG/L
P-ISOPROPYLtolUENE	12	U	U	0.9	12	UG/L
SEC-BUTYLBENZENE	13	U	U	1.2	13	UG/L
STYRENE	4	U	U	1.2	4	UG/L
TERT-BUTYLBENZENE	14	U	U	1.3	14	UG/L
TETRAChLOROETHENE	14	U	U	1.7	14	UG/L
TOLUENE	11	U	U	1.4	11	UG/L

TOLUENE-D8	98			1	1	ERCEN
TRANS-1,2-DICHLOROETHENE	6	U	U	0.9	6	UG/L
TRANS-1,3-DICHLOROPROPENE	10	U	U	1.7	10	UG/L
TRICHLOROETHENE	230			1	10	UG/L
TRICHLOROFLUOROMETHANE	8	R	U	2.2	8	UG/L
VINYL CHLORIDE	11	R	U	1.6	11	UG/L
						SCVMIS
						SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA038	1,1,1,2-TETRACHLOROETHANE	2.5	U	U	0.74	2.5	UG/L	
	1,1,1-TRICHLOROETHANE	4	U	U	0.65	4	UG/L	
	1,1,2,2-TETRACHLOROETHANE	2	U	U	0.85	2	UG/L	
	1,1,2-TRICHLOROETHANE	5	U	U	0.8	5	UG/L	
	1,1-DICHLOROETHANE	2	U	U	0.55	2	UG/L	
	1,1-DICHLOROPROPENE	6	U	U	0.75	6	UG/L	
	1,1-DICHLOROETHENE	5	U	U	0.7	5	UG/L	
	1,2,3-TRICHLOROBENZENE	1.5	U	U	0.75	1.5	UG/L	
	1,2,3-TRICHLOROPROPANE	16	U	U	0.75	16	UG/L	
	1,2,4-TRICHLOROBENZENE	2	U	U	0.65	2	UG/L	
	1,2,4-TRIMETHYLBENZENE	71			0.45	6.5	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	13	U	U	1.25	13	UG/L	
	1,2-DIBROMOETHANE	3	U	U	0.95	3	UG/L	
	1,2-DICHLOROBENZENE	15	U	U	0.5	1.5	UG/L	
	1,2-DICHLOROETHANE	3	U	U	1.65	3	UG/L	
	1,2-DICHLOROPROPANE	2	U	U	0.45	2	UG/L	
	1,3,5-TRIMETHYLBENZENE	8.9			0.5	2.5	UG/L	
	1,3-DICHLOROBENZENE	6	U	U	0.25	6	UG/L	
	1,3-DICHLOROPROPANE	2	U	U	0.75	2	UG/L	
	1,4-DICHLOROBENZENE	15	U	U	0.6	1.5	UG/L	
	1-CHLOROHEXANE	2.5	U	U	0.7	2.5	UG/L	
	2,2-DICHLOROPROPANE	18	U	U	1.6	18	UG/L	
	2-CHLOROTOLUENE	2	U	U	0.5	2	UG/L	
	4-BROMOFLUOROBENZENE	103			0.5	0.5	ERCEN	
	4-CHLOROTOLUENE	3	U	U	0.4	3	UG/L	
	BENZENE	78			0.5	2	UG/L	
	BROMOBENZENE	1.5	U	U	0.45	1.5	UG/L	
	BROMOCHLOROMETHANE	2	R	U	0.9	2	UG/L	SSCCV%
	BROMODICHLOROMETHANE	4	U	U	0.5	4	UG/L	
	BROMOFORM	6	U	U	0.9	6	UG/L	
	BROMOMETHANE	5.5	R	U	1	5.5	UG/L	CV%D
	BROMOMETHANE	5.5	R	U	1	5.5	UG/L	SCVMIS
	CARBON TETRACHLORIDE	11	U	U	0.8	11	UG/L	
	CHLOROBENZENE	2	U	U	0.6	2	UG/L	
	CHLOROETHANE	5	R	U	1.5	5	UG/L	SCVMIS
	CHLOROFORM	1.5	U	U	0.75	1.5	UG/L	
	CHLOROMETHANE	6.5	R	U	0.45	6.5	UG/L	SCVMIS
	CIS-1,2-DICHLOROETHENE	6	U	U	0.4	6	UG/L	
	CIS-1,3-DICHLOROPROPENE	5	U	U	0.55	5	UG/L	
	DIBROMOCHLOROMETHANE	2.5	U	U	0.8	2.5	UG/L	
	DIBROMOFLUOROMETHANE	98			0.5	0.5	ERCEN	
	DIBROMOMETHANE	12	U	U	1	12	UG/L	
	DICHLORODIFLUOROMETHANE	5	R	U	1.8	5	UG/L	CV%D
	DICHLORODIFLUOROMETHANE	5	R	U	1.8	5	UG/L	SCVMIS
	ETHYLBENZENE	32			0.6	3	UG/L	
	HEXAChLOROBUTADIENE	5.5	U	U	1	5.5	UG/L	
	ISOPROPYLBENZENE	9			0.65	2.5	UG/L	

6521388

9802168 SW8260A

Page 18 of 20

m,p-xylene	37			1.1	6.5	UG/L	
METHYLENE CHLORIDE	6	R	U	1.05	1.5	UG/L	SSCCV%
METHYLENE CHLORIDE	6	R	U	1.05	1.5	UG/L	CV%D
METHYLENE CHLORIDE	6	R	U	1.05	1.5	UG/L	IC%RSI
METHYLENE CHLORIDE	6	R	U	1.05	1.5	UG/L	BD%R
METHYLENE CHLORIDE	6	R	U	1.05	1.5	UG/L	BS%R
N-PROPYLBENZENE	7.6			0.45	2	UG/L	
NAPHTHALENE	41			0.6	2	UG/L	
O-XYLENE	5.5	U	U	0.65	5.5	UG/L	
P-ISOPROPYLtolUENE	1.5	F	F	0.45	6	UG/L	
SEC-BUTYLBENZENE	2.4	F	F	0.6	6.5	UG/L	
STYRENE	2	U	U	0.6	2	UG/L	
TERT-BUTYLBENZENE	7	U	U	0.65	7	UG/L	
TETRACHLOROETHENE	7	U	U	0.85	7	UG/L	
TOLUENE	5.5	U	U	0.7	5.5	UG/L	
TOLUENE-D8	102			0.5	0.5	ERCEN	
TRANS-1,2-DICHLOROETHENE	3	U	U	0.45	3	UG/L	
TRANS-1,3-DICHLOROPROPENE	5	U	U	0.85	5	UG/L	
TRICHLOROETHENE	22			0.5	5	UG/L	
TRICHLOROFLUOROMETHANE	4	R	U	1.1	4	UG/L	SCVMIS
VINYL CHLORIDE	5.5	R	U	0.8	5.5	UG/L	SCVMIS

Validation Flag Abbreviations

Abbreviation	Validation Reason
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlocal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

6521390

9802168 SW8260A

Page 20 of 20

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFlag	Lab R flag removed; Re-analysis confirmed matnx effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D critena
ReplaceJFlag	Lab J flag removed - Senal Dilution compound within critena
SCVMISS	Missing target analyte

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL)

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) critena.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matnx effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in nsk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

NAS FW JRB AOC 2

CEP-94
6521391



Data Quality Evaluation

CH2MHILL

SDG 9802180

Method SW8260A

Reviewer mhc

Date 5/21/98

Matrix Water

Senior Review Vito D'Aurora

Field Samples

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
-----------------	------------------	-----------------	------------------	-----------------	------------------

Water

AIA039TB1	TB	AIA040EB1	EB	AIA041	N
- AIA042	N	AIA043	N	AIA044	N
AIA045FD1	FD	AIA046	N	AIA047	N
AIA048	N	AIA049	N	AIA050	N
AIA051	N	AIA052	N	AIA053	N
LABQC	BD				

1. Case Narrative

Items of Interest

1. Methylene Chloride was detected > the RL in the method blank. This compound was detected < the calculated value in samples 1,2,3,6-9,11,&13, so the data were flagged U (by the lab).
2. All LCS/LCD recoveries and RPDs were within acceptance criteria with the exception of Methylene Chloride in the LCS/LCD, 1,2-dibromo-3-chloropropane and Naphthalene in the RPD. The background levels of Methylene chloride detected in this laboratory can cause inconsistent and irreproducible results for low level analyses.
3. MS/MSDs were not performed due to insufficient sample volume.
4. Due to the concentration of target analytes, samples 4-9 and 11-14 were analyzed at a higher dilution.
5. All initial calibration criteria were within acceptance criteria. Method SW8260B states any compound exceeding 15% RSD criteria should be analyzed with a higher order curve such as a quadratic. We quantitated these compounds using the average response factor due to a software programming problem associated with Hewlett-Packard MSDs. The manufacturer is now aware of the problem and is working on a solution.

2. Blank Summary

6521392

9802180 SW8260A

Page 2 of 24

Field Blanks No target analytes detected >RL in either the trip blank or equipment blank.

Method Blanks 1. Methylene Chloride was detected > the RL in the method blank. This compound was detected < the calculated value in samples 1,2,3,6-9,11,&13, so the data were flagged U (by the lab).

<u>Blank Type</u>	<u>Blank ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Report Limit</u>	<u>LabFlag</u>	<u>Units</u>
LB	LABQC	METHYLENE CHLORI	0.8	0.21		UG/L

3. Spikes and Duplicates

Field Duplicates All criteria met.

Laboratory Duplicates None in this SDG.

Matrix Spike MS/MSDs were not performed due to insufficient sample volume.

4. Laboratory Control Sample

1. The LCS/LCD recovered < LCL for Methylene Chloride and > UCL for n-butylbenzene. There is no documentation in the case narrative of the n-butylbenzene exceedance. The Methylene chloride results were J flagged for detects and R flagged for non-detects. N-butylbenzene was not detected in the samples and the data was not qualified.
2. LCS/LCD RPD criteria was exceeded for 1,2-dibromo-3-chloropropane and Naphthalene. Detections of these analytes were J flagged and non-detects were not qualified.

<u>Matrix</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>Analyte</u>	<u>Recovery</u>	<u>LowerLimit</u>	<u>UpperLimit</u>
WATER	BD	LABQC	METHYLENE CHLORIDE	68	75	125
WATER	BD	LABQC	N-BUTYLBENZENE	126	75	125
WATER	BS	LABQC	METHYLENE CHLORIDE	57	75	125
WATER	BS	LABQC	N-BUTYLBENZENE	126	75	125

5. Surrogates All criteria were met.

6. Tuning and Mass Calibration All criteria met.

7. Internal Standard All internal standard recoveries were within acceptance criteria.

! C E I G C I
6521393

9802180 SW8260A

Page 3 of 24

8. Calibration Information

Initial Calibration

1. The incorrect initial calibration form 6 of (2/23/98) is included in this package and the (2/24/98) ICAL is missing and the associated raw data.
2. Package 9802159 shares the same calibration and the form 6 from this package was used to validate this package.
3. Methylene chloride exceeded the RSD criteria and the associated sample results have been R flagged.

<u>Field ID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation Reason</u>
AIA041	METHYLENE CHLORIDE	R	IC%RSD
AIA042	METHYLENE CHLORIDE	R	IC%RSD
AIA043	METHYLENE CHLORIDE	R	IC%RSD
AIA044	METHYLENE CHLORIDE	R	IC%RSD
AIA045FD1	METHYLENE CHLORIDE	R	IC%RSD
AIA046	METHYLENE CHLORIDE	R	IC%RSD
AIA047	METHYLENE CHLORIDE	R	IC%RSD
AIA048	METHYLENE CHLORIDE	R	IC%RSD
AIA049	METHYLENE CHLORIDE	R	IC%RSD
AIA050	METHYLENE CHLORIDE	R	IC%RSD
AIA051	METHYLENE CHLORIDE	R	IC%RSD
AIA052	METHYLENE CHLORIDE	R	IC%RSD
AIA053	METHYLENE CHLORIDE	R	IC%RSD

Continuing Calibration

1. SSCCV not included in package. Package 9802168 share the same SSCCV this was used to validate this package. Six compounds were missing from the SSCCV from 2/24/98. Two compounds exceeded 25%D. The associated sample results were validated with an R flag.
2. The CCV of 3/2/98 exceeded 25%D for the analyte MeCl, bromomethane, and dichlorodifluoromethane. The associated sample results were validated with an R flag.

<u>Field ID</u>	<u>LabsampleID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation</u>
AIA041	9802180-3	BROMOMETHANE	R	CV%D
AIA041	9802180-3	DICHLORODIFLUOROMETHANE	R	CV%D
AIA041	9802180-3	METHYLENE CHLORIDE	R	CV%D
AIA042	9802180-4	BROMOMETHANE	R	CV%D
AIA042	9802180-4	DICHLORODIFLUOROMETHANE	R	CV%D
AIA042	9802180-4	METHYLENE CHLORIDE	R	CV%D
AIA043	9802180-5	BROMOMETHANE	R	CV%D
AIA043	9802180-5	DICHLORODIFLUOROMETHANE	R	CV%D
AIA043	9802180-5	METHYLENE CHLORIDE	R	CV%D
AIA044	9802180-6	BROMOMETHANE	R	CV%D
AIA044	9802180-6	DICHLORODIFLUOROMETHANE	R	CV%D
AIA044	9802180-6	METHYLENE CHLORIDE	R	CV%D
AIA045FD1	9802180-7	BROMOMETHANE	R	CV%D

AIA045FD1	9802180-7	DICHLORODIFLUOROMETHANE R	CV%D
AIA045FD1	9802180-7	METHYLENE CHLORIDE R	CV%D
AIA046	9802180-8	BROMOMETHANE R	CV%D
AIA046	9802180-8	DICHLORODIFLUOROMETHANE R	CV%D
AIA046	9802180-8	METHYLENE CHLORIDE R	CV%D
AIA047	9802180-9	BROMOMETHANE R	CV%D
AIA047	9802180-9	DICHLORODIFLUOROMETHANE R	CV%D
AIA047	9802180-9	METHYLENE CHLORIDE R	CV%D
AIA048	9802180-10	BROMOMETHANE R	CV%D
AIA048	9802180-10	DICHLORODIFLUOROMETHANE R	CV%D
AIA048	9802180-10	METHYLENE CHLORIDE R	CV%D
AIA049	9802180-11	BROMOMETHANE R	CV%D
AIA049	9802180-11	DICHLORODIFLUOROMETHANE R	CV%D
AIA049	9802180-11	METHYLENE CHLORIDE R	CV%D
AIA050	9802180-12	BROMOMETHANE R	CV%D
AIA050	9802180-12	DICHLORODIFLUOROMETHANE R	CV%D
AIA050	9802180-12	METHYLENE CHLORIDE R	CV%D
AIA051	9802180-13	BROMOMETHANE R	CV%D
AIA051	9802180-13	DICHLORODIFLUOROMETHANE R	CV%D
AIA051	9802180-13	METHYLENE CHLORIDE R	CV%D
AIA052	9802180-14	BROMOMETHANE R	CV%D
AIA052	9802180-14	DICHLORODIFLUOROMETHANE R	CV%D
AIA052	9802180-14	METHYLENE CHLORIDE R	CV%D
AIA053	9802180-15	BROMOMETHANE R	CV%D
AIA053	9802180-15	DICHLORODIFLUOROMETHANE R	CV%D
AIA053	9802180-15	METHYLENE CHLORIDE R	CV%D

9. Holding Time

Holding times were met.

10. Summary**General Comments**

1. The LCS/LCD recovered < LCL for Methylene Chloride and > UCL for n-butylbenzene. There is no documentation in the case narrative of the n-butylbenzene exceedance. The Methylene chloride results were J flagged for detects and R flagged for non-detects. N-butylbenzene was not detected in the samples and the data was not qualified.
2. LCS/LCD RPD criteria was exceeded for 1,2-dibromo-3-chloropropane and Naphthalene. Detections of these analytes were J flagged and non-detects were not qualified.
3. The incorrect initial calibration form 6 of (2/23/98) is included in this package and the (2/24/98) ICAL is missing and the associated raw data.
4. Package 9802159 shares the same calibration and the form 6 from this package was used to validate this package.
5. Methylene chloride exceeded the RSD criteria and the associated sample results have been R flagged.
6. SSCCV not included in package. Package 9802168 share the same SSCCV this was used to validate this packaged. Six compounds were missing from the SSCCV from

2/24/98. Two compounds exceeded 25%D. The associated sample results were validated with an R flag.

7. The CCV of 3/2/98 exceeded 25%D for the analyte MeCl, bromomethane, and dichlorodifluoromethane. The associated sample results were validated with an R flag.

- Data Package Completeness**
1. There are no 1X results for samples requiring dilution.
 2. There is no demonstration of a MDL being completed within 1yr.
 3. All the forms and associated raw data for the calibration performed on 2/24/98 are missing.
 4. There is no documentation in the case narrative covering the SSCCV and CCV exceedances.
 5. All requested analyses completed as defined by the COC and any exception reports.

Forms Review/ Items of Interest Target analytes were detected in all samples.

COC Review All necessary chain of custody procedures were adhered to and the documentation is complete.

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA041	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.148	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	U	U	0.16	1	UG/L	
	1,1-DICHLOROETHANE	0.4	U	U	0.11	0.4	UG/L	
	1,1-DICHLOROETHENE	1.2	U	U	0.15	1.2	UG/L	
	1,1-DICHLOROPROPENE	1	U	U	0.14	1	UG/L	
	1,2,3-TRICHLOROBENZENE	0.3	U	U	0.15	0.3	UG/L	
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	U	U	0.13	0.4	UG/L	
	1,2,4-TRIMETHYLBENZENE	1.3	U	U	0.09	1.3	UG/L	
	1,2-DIBROMOETHANE	0.6	U	U	0.19	0.6	UG/L	
	1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
	1,2-DICHLOROETHANE	0.6	U	U	0.33	0.6	UG/L	
	1,2-DICHLOROPROPANE	0.4	U	U	0.09	0.4	UG/L	
	1,3,5-TRIMETHYLBENZENE	0.5	U	U	0.1	0.5	UG/L	
	1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
	1,3-DICHLOROPROPANE	0.4	U	U	0.15	0.4	UG/L	
	1,4-DICHLOROBENZENE	0.3	U	U	0.12	0.3	UG/L	
	1-CHLOROHEXANE	0.5	U	U	0.14	0.5	UG/L	
	2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L	
	2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	
	4-BROMOFLUOROBENZENE	98			0.1	0.1	ERCEN	
	4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L	
	BENZENE	0.4	U	U	0.1	0.4	UG/L	
	BROMOBENZENE	0.3	U	U	0.09	0.3	UG/L	
	BROMOCHLOROMETHANE	0.4	R	U	0.18	0.4	UG/L	SSCCV%
	BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L	
	BROMOFORM	1.2	U	U	0.18	1.2	UG/L	
	BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	CV%D
	BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	SCVMIS
	CARBON TETRACHLORIDE	2.1	U	U	0.16	2.1	UG/L	
	CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	
	CHLOROETHANE	1	R	U	0.3	1	UG/L	SCVMIS
	CHLOROFORM	0.3	U	U	0.15	0.3	UG/L	
	CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	SCVMIS
	CIS-1,2-DICHLOROETHENE	5			0.08	1.2	UG/L	
	CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L	
	DIBROMOCHLOROMETHANE	0.5	U	U	0.16	0.5	UG/L	
	DIBROMOFLUOROMETHANE	106			0.1	0.1	ERCEN	
	DIBROMOMETHANE	2.4	U	U	0.2	2.4	UG/L	
	DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L	CV%D
	DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L	SCVMIS
	ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L	
	HEXAChLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L	
	ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L	
	m,p-xylene	1.3	U	U	0.22	1.3	UG/L	

METHYLENE CHLORIDE	0.8	R	U	0.21	0.3	UG/L	BD%R
METHYLENE CHLORIDE	0.8	R	U	0.21	0.3	UG/L	BS%R
METHYLENE CHLORIDE	0.8	R	U	0.21	0.3	UG/L	CV%D
METHYLENE CHLORIDE	0.8	R	U	0.21	0.3	UG/L	IC%RSI
METHYLENE CHLORIDE	0.8	R	U	0.21	0.3	UG/L	SSCCV%
N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L	
O-XYLENE	1.1	U	U	0.13	1.1	UG/L	
P-ISOPROPYLtolUENE	1.2	U	U	0.09	1.2	UG/L	
SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L	
STYRENE	0.4	U	U	0.12	0.4	UG/L	
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L	
TETRACHLOROETHENE	1.4	U	U	0.17	1.4	UG/L	
TOLUENE	1.1	U	U	0.14	1.1	UG/L	
TOLUENE-D8	102			0.1	0.1	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.6	U	U	0.09	0.6	UG/L	
TRANS-1,3-DICHLOROPROPENE	1	U	U	0.17	1	UG/L	
TRICHLOROETHENE	1	U	U	0.1	1	UG/L	
TRICHLOROFUOROMETHANE	0.8	R	U	0.22	0.8	UG/L	SCVMIS
VINYL CHLORIDE	1.1	R	U	0.16	11	UG/L	SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA042	1,1,1,2-TETRACHLOROETHANE	10	U	U	2.96	10	UG/L	
	1,1,1-TRICHLOROETHANE	16	U	U	2.6	16	UG/L	
	1,1,2,2-TETRACHLOROETHANE	8	U	U	3.4	8	UG/L	
	1,1,2-TRICHLOROETHANE	20	U	U	3.2	20	UG/L	
	1,1-DICHLOROETHANE	8	U	U	2.2	8	UG/L	
	1,1-DICHLOROETHENE	24	U	U	3	24	UG/L	
	1,1-DICHLOROPROPENE	20	U	U	2.8	20	UG/L	
	1,2,3-TRICHLOROBENZENE	6	U	U	3	6	UG/L	
	1,2,3-TRICHLOROPROPANE	64	U	U	3	64	UG/L	
	1,2,4-TRICHLOROBENZENE	8	U	U	2.6	8	UG/L	
	1,2,4-TRIMETHYLBENZENE	26	U	U	1.8	26	UG/L	
	1,2-DIBROMOETHANE	12	U	U	3.8	12	UG/L	
	1,2-DICHLOROBENZENE	6	U	U	2	6	UG/L	
	1,2-DICHLOROETHANE	12	U	U	6.6	12	UG/L	
	1,2-DICHLOROPROPANE	8	U	U	1.8	8	UG/L	
	1,3,5-TRIMETHYLBENZENE	10	U	U	2	10	UG/L	
	1,3-DICHLOROBENZENE	24	U	U	1	24	UG/L	
	1,3-DICHLOROPROPANE	8	U	U	3	8	UG/L	
	1,4-DICHLOROBENZENE	6	U	U	2.4	6	UG/L	
	1-CHLOROHEXANE	10	U	U	2.8	10	UG/L	
	2,2-DICHLOROPROPANE	70	U	U	6.4	70	UG/L	
	2-CHLOROTOLUENE	8	U	U	2	8	UG/L	
	4-BROMOFLUOROBENZENE	97			2	2	ERCEN	
	4-CHLOROTOLUENE	12	U	U	1.6	12	UG/L	
	BENZENE	8	U	U	2	8	UG/L	
	BROMOBENZENE	6	U	U	1.8	6	UG/L	
	BROMOCHLOROMETHANE	8	R	U	3.6	8	UG/L	SSCCV%
	BROMODICHLOROMETHANE	16	U	U	2	16	UG/L	
	BROMOFORM	24	U	U	3.6	24	UG/L	
	BROMOMETHANE	22	R	U	4	22	UG/L	CV%D
	BROMOMETHANE	22	R	U	4	22	UG/L	SCVMIS
	CARBON TETRACHLORIDE	42	U	U	3.2	42	UG/L	
	CHLOROBENZENE	8	U	U	2.4	8	UG/L	
	CHLOROETHANE	20	R	U	6	20	UG/L	SCVMIS

6521398

9802180 SW8260A

Page 8 of 24

CHLOROFORM	6	U	U	3	6	UG/L	
CHLOROMETHANE	26	R	U	1.8	26	UG/L	SCVMIS
CIS-1,2-DICHLOROETHENE	32			1.6	24	UG/L	
CIS-1,3-DICHLOROPROPENE	20	U	U	2.2	20	UG/L	
DIBROMOCHLOROMETHANE	10	U	U	3.2	10	UG/L	
DIBROMOFLUOROMETHANE	101			2	2	ERCEN	
DIBROMOMETHANE	48	U	U	4	48	UG/L	
DICHLORODIFLUOROMETHANE	20	R	U	7.2	20	UG/L	CV%D
DICHLORODIFLUOROMETHANE	20	R	U	7.2	20	UG/L	SCVMIS
ETHYLBENZENE	12	U	U	2.4	12	UG/L	
HEXA-CHLOROBUTADIENE	22	U	U	4	22	UG/L	
ISOPROPYLBENZENE	10	U	U	2.6	10	UG/L	
m,p-xylene	26	U	U	4.4	26	UG/L	
METHYLENE CHLORIDE	27	R		4.2	6	UG/L	CV%D
METHYLENE CHLORIDE	27	R		4.2	6	UG/L	IC%RSI
METHYLENE CHLORIDE	27	R		4.2	6	UG/L	SSCCV%
N-PROPYLBENZENE	8	U	U	1.8	8	UG/L	
O-XYLENE	22	U	U	2.6	22	UG/L	
P-ISOPROPYL TOLUENE	24	U	U	1.8	24	UG/L	
SEC-BUTYLBENZENE	26	U	U	2.4	26	UG/L	
STYRENE	8	U	U	2.4	8	UG/L	
TERT-BUTYLBENZENE	28	U	U	2.6	28	UG/L	
TETRA-CHLOROETHENE	28	U	U	3.4	28	UG/L	
TOLUENE	22	U	U	2.8	22	UG/L	
TOLUENE-D8	100			2	2	ERCEN	
TRANS-1,2-DICHLOROETHENE	12	U	U	1.8	12	UG/L	
TRANS-1,3-DICHLOROPROPENE	20	U	U	3.4	20	UG/L	
TRICHLOROETHENE	410			2	20	UG/L	
TRICHLOROFLUOROMETHANE	16	R	U	4.4	16	UG/L	SCVMIS
VINYL CHLORIDE	22	R	U	3.2	22	UG/L	SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA043	1,1,1,2-TETRA-CHLOROETHANE	10	U	U	2.96	10	UG/L	
	1,1,1-TRICHLOROETHANE	16	U	U	2.6	16	UG/L	
	1,1,2,2-TETRA-CHLOROETHANE	8	U	U	3.4	8	UG/L	
	1,1,2-TRICHLOROETHANE	20	U	U	3.2	20	UG/L	
	1,1-DICHLOROETHANE	8	U	U	2.2	8	UG/L	
	1,1-DICHLOROETHENE	8.2	F	F	3	24	UG/L	
	1,1-DICHLOROPROPENE	20	U	U	2.8	20	UG/L	
	1,2,3-TRICHLOROBENZENE	6	U	U	3	6	UG/L	
	1,2,3-TRICHLOROPROPANE	64	U	U	3	64	UG/L	
	1,2,4-TRICHLOROBENZENE	8	U	U	2.6	8	UG/L	
	1,2,4-TRIMETHYL BENZENE	26	U	U	1.8	26	UG/L	
	1,2-DIBROMOETHANE	12	U	U	3.8	12	UG/L	
	1,2-DICHLOROBENZENE	6	U	U	2	6	UG/L	
	1,2-DICHLOROETHANE	12	U	U	6.6	12	UG/L	
	1,2-DICHLOROPROPANE	8	U	U	1.8	8	UG/L	
	1,3,5-TRIMETHYL BENZENE	10	U	U	2	10	UG/L	
	1,3-DICHLOROBENZENE	24	U	U	1	24	UG/L	
	1,3-DICHLOROPROPANE	8	U	U	3	8	UG/L	
	1,4-DICHLOROBENZENE	6	U	U	2.4	6	UG/L	
	1-CHLOROHEXANE	10	U	U	2.8	10	UG/L	
	2,2-DICHLOROPROPANE	70	U	U	6.4	70	UG/L	
	2-CHLOROTOLUENE	8	U	U	2	8	UG/L	
	4-BROMOFLUOROBENZENE	100			2	2	ERCEN	

4-CHLOROTOLUENE	12	U	U	1.6	12	UG/L	
BENZENE	8	U	U	2	8	UG/L	
BROMOBENZENE	6	U	U	1.8	6	UG/L	
BROMOCHLOROMETHANE	8	R	U	3.6	8	UG/L	SSCCV%
BROMODICHLOROMETHANE	16	U	U	2	16	UG/L	
BROMOFORM	24	U	U	3.6	24	UG/L	
BROMOMETHANE	22	R	U	4	22	UG/L	SCVMIS
BROMOMETHANE	22	R	U	4	22	UG/L	CV%D
CARBON TETRACHLORIDE	42	U	U	3.2	42	UG/L	
CHLOROBENZENE	8	U	U	2.4	8	UG/L	
CHLOROETHANE	20	R	U	6	20	UG/L	SCVMIS
CHLOROFORM	6	U	U	3	6	UG/L	
CHLOROMETHANE	26	R	U	1.8	26	UG/L	SCVMIS
CIS-1,2-DICHLOROETHENE	73			1.6	24	UG/L	
CIS-1,3-DICHLOROPROPENE	20	U	U	2.2	20	UG/L	
DIBROMOCHLOROMETHANE	10	U	U	3.2	10	UG/L	
DIBROMOFLUOROMETHANE	103			2	2	ERCEN	
DIBROMOMETHANE	48	U	U	4	48	UG/L	
DICHLORODIFLUOROMETHANE	20	R	U	7.2	20	UG/L	CV%D
DICHLORODIFLUOROMETHANE	20	R	U	7.2	20	UG/L	SCVMIS
ETHYLBENZENE	12	U	U	2.4	12	UG/L	
HEXACHLOROBUTADIENE	22	U	U	4	22	UG/L	
ISOPROPYLBENZENE	10	U	U	2.6	10	UG/L	
m,p-xylene	26	U	U	4.4	26	UG/L	
METHYLENE CHLORIDE	27	R		4.2	6	UG/L	SSCCV%
METHYLENE CHLORIDE	27	R		4.2	6	UG/L	CV%D
METHYLENE CHLORIDE	27	R		4.2	6	UG/L	- IC%RSI
N-PROPYLBENZENE	8	U	U	1.8	8	UG/L	
O-XYLENE	22	U	U	2.6	22	UG/L	
P-ISOPROPYLtolUENE	24	U	U	1.8	24	UG/L	
SEC-BUTYLBENZENE	26	U	U	2.4	26	UG/L	
STYRENE	8	U	U	2.4	8	UG/L	
TERT-BUTYLBENZENE	28	U	U	2.6	28	UG/L	
TETRACHLOROETHENE	63			3.4	28	UG/L	
TOLUENE	22	U	U	2.8	22	UG/L	
TOLUENE-D8	97			2	2	ERCEN	
TRANS-1,2-DICHLOROETHENE	12	U	U	1.8	12	UG/L	
TRANS-1,3-DICHLOROPROPENE	20	U	U	3.4	20	UG/L	
TRICHLOROETHENE	670			2	20	UG/L	
TRICHLOROFUOROMETHANE	16	R	U	4.4	16	UG/L	SCVMIS
VINYL CHLORIDE	22	R	U	3.2	22	UG/L	SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA044	1,1,1,2-TETRACHLOROETHANE	2.5	U	U	0.74	2.5	UG/L	
	1,1,1-TRICHLOROETHANE	4	U	U	0.65	4	UG/L	
	1,1,2,2-TETRACHLOROETHANE	2	U	U	0.85	2	UG/L	
	1,1,2-TRICHLOROETHANE	5	U	U	0.8	5	UG/L	
	1,1-DICHLOROETHANE	2	U	U	0.55	2	UG/L	
	1,1-DICHLOROETHENE	6	U	U	0.75	6	UG/L	
	1,1-DICHLOROPROPENE	5	U	U	0.7	5	UG/L	
	1,2,3-TRICHLOROBENZENE	1.5	U	U	0.75	1.5	UG/L	
	1,2,3-TRICHLOROPROPANE	16	U	U	0.75	16	UG/L	
	1,2,4-TRICHLOROBENZENE	2	U	U	0.65	2	UG/L	
	1,2,4-TRIMETHYLBENZENE	6.5	U	U	0.45	6.5	UG/L	
	1,2-DIBROMOETHANE	3	U	U	0.95	3	UG/L	

1,2-DICHLOROBENZENE	1.5	U	U	0.5	1.5	UG/L	
1,2-DICHLOROETHANE	3	U	U	1.65	3	UG/L	
1,2-DICHLOROPROPANE	2	U	U	0.45	2	UG/L	
1,3,5-TRIMETHYLBENZENE	2.5	U	U	0.5	2.5	UG/L	
1,3-DICHLOROBENZENE	6	U	U	0.25	6	UG/L	
1,3-DICHLOROPROPANE	2	U	U	0.75	2	UG/L	
1,4-DICHLOROBENZENE	1.5	U	U	0.6	1.5	UG/L	
1-CHLOROHEXANE	2.5	U	U	0.7	2.5	UG/L	
2,2-DICHLOROPROPANE	18	U	U	1.6	18	UG/L	
2-CHLOROTOLUENE	2	U	U	0.5	2	UG/L	
4-BROMOFLUOROBENZENE	100			0.5	0.5	ERCEN	
4-CHLOROTOLUENE	3	U	U	0.4	3	UG/L	
BENZENE	2	U	U	0.5	2	UG/L	
BROMOBENZENE	1.5	U	U	0.45	1.5	UG/L	
BROMOCHLOROMETHANE	2	R	U	0.9	2	UG/L	SSCCV%
BROMODICHLOROMETHANE	4	U	U	0.5	4	UG/L	
BROMOFORM	6	U	U	0.9	6	UG/L	
BROMOMETHANE	5.5	R	U	1	5.5	UG/L	SCVMIS
BROMOMETHANE	5.5	R	U	1	5.5	UG/L	CV%D
CARBON TETRACHLORIDE	14	U	U	0.8	11	UG/L	
CHLOROBENZENE	2	U	U	0.6	2	UG/L	
CHLOROETHANE	5	R	U	1.5	5	UG/L	SCVMIS
CHLOROFORM	1.5	U	U	0.75	1.5	UG/L	
CHLOROMETHANE	6.5	R	U	0.45	6.5	UG/L	SCVMIS
CIS-1,2-DICHLOROETHENE	4.4	F	F	0.4	6	UG/L	
CIS-1,3-DICHLOROPROPENE	5	U	U	0.55	5	UG/L	
DIBROMOCHLOROMETHANE	2.5	U	U	0.8	2.5	UG/L	
DIBROMOFLUOROMETHANE	103			0.5	0.5	ERCEN	
DIBROMOMETHANE	12	U	U	1	12	UG/L	
DICHLORODIFLUOROMETHANI	5	R	U	1.8	5	UG/L	CV%D
DICHLORODIFLUOROMETHANI	5	R	U	1.8	5	UG/L	SCVMIS
ETHYLBENZENE	3	U	U	0.6	3	UG/L	
HEXAChLOROBUTADIENE	5.5	U	U	1	5.5	UG/L	
ISOPROPYLBENZENE	2.5	U	U	0.65	2.5	UG/L	
m,p-xylene	6.5	U	U	1.1	6.5	UG/L	
METHYLENE CHLORIDE	3.1	R	U	1.05	1.5	UG/L	SSCCV%
METHYLENE CHLORIDE	3.1	R	U	1.05	1.5	UG/L	BD%R
METHYLENE CHLORIDE	3.1	R	U	1.05	1.5	UG/L	IC%RSI
METHYLENE CHLORIDE	3.1	R	U	1.05	1.5	UG/L	CV%D
METHYLENE CHLORIDE	3.1	R	U	1.05	1.5	UG/L	BS%R
N-PROPYLBENZENE	2	U	U	0.45	2	UG/L	
O-XYLENE	5.5	U	U	0.65	5.5	UG/L	
P-ISOPROPYLtolUENE	6	U	U	0.45	6	UG/L	
SEC-BUTYLBENZENE	6.5	U	U	0.6	6.5	UG/L	
STYRENE	2	U	U	0.6	2	UG/L	
TERT-BUTYLBENZENE	7	U	U	0.65	7	UG/L	
TETRACHLOROETHENE	8.5			0.85	7	UG/L	
TOLUENE	5.5	U	U	0.7	5.5	UG/L	
TOLUENE-D8	103			0.5	0.5	ERCEN	
TRANS-1,2-DICHLOROETHENE	3	U	U	0.45	3	UG/L	
TRANS-1,3-DICHLOROPROPENE	5	U	U	0.85	5	UG/L	
TRICHLOROETHENE	140			0.5	5	UG/L	
TRICHLOROFLUOROMETHANE	4	R	U	1.1	4	UG/L	SCVMIS
VINYL CHLORIDE	5.5	R	U	0.8	5.5	UG/L	SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA045FD1	1,1,1,2-TETRACHLOROETHANE	2.5	U	U	0.74	2.5	UG/L	
	1,1,1-TRICHLOROETHANE	4	U	U	0.65	4	UG/L	
	1,1,2,2-TETRACHLOROETHANE	2	U	U	0.85	2	UG/L	
	1,1,2-TRICHLOROETHANE	5	U	U	0.8	5	UG/L	
	1,1-DICHLOROETHANE	2	U	U	0.55	2	UG/L	
	1,1-DICHLOROETHENE	6	U	U	0.75	6	UG/L	
	1,1-DICHLOROPROPENE	5	U	U	0.7	5	UG/L	
	1,2,3-TRICHLOROBENZENE	1.5	U	U	0.75	1.5	UG/L	
	1,2,3-TRICHLOROPROPANE	16	U	U	0.75	16	UG/L	
	1,2,4-TRICHLOROBENZENE	2	U	U	0.65	2	UG/L	
	1,2,4-TRIMETHYLBENZENE	6.5	U	U	0.45	6.5	UG/L	
	1,2-DIBROMOETHANE	3	U	U	0.95	3	UG/L	
	1,2-DICHLOROBENZENE	1.5	U	U	0.5	1.5	UG/L	
	1,2-DICHLOROETHANE	3	U	U	1.65	3	UG/L	
	1,2-DICHLOROPROPANE	2	U	U	0.45	2	UG/L	
	1,3,5-TRIMETHYLBENZENE	2.5	U	U	0.5	2.5	UG/L	
	1,3-DICHLOROBENZENE	6	U	U	0.25	6	UG/L	
	1,3-DICHLOROPROPANE	2	U	U	0.75	2	UG/L	
	1,4-DICHLOROBENZENE	1.5	U	U	0.6	1.5	UG/L	
	1-CHLOROHEXANE	2.5	U	U	0.7	2.5	UG/L	
	2,2-DICHLOROPROPANE	18	U	U	1.6	18	UG/L	
	2-CHLOROTOLUENE	2	U	U	0.5	2	UG/L	
	4-BROMOFLUOROBENZENE	104			0.5	0.5	ERCEN	
	4-CHLOROTOLUENE	3	U	U	0.4	3	UG/L	
	BENZENE	2	U	U	0.5	2	UG/L	
	BROMOBENZENE	1.5	U	U	0.45	1.5	UG/L	
	BROMOCHLOROMETHANE	2	R	U	0.9	2	UG/L	SSCCV%
	BROMODICHLOROMETHANE	4	U	U	0.5	4	UG/L	
	BROMOFORM	6	U	U	0.9	6	UG/L	
	BROMOMETHANE	5.5	R	U	1	5.5	UG/L	CV%D
	BROMOMETHANE	5.5	R	U	1	5.5	UG/L	SCVMIS
	CARBON TETRACHLORIDE	11	U	U	0.8	11	UG/L	
	CHLOROBENZENE	2	U	U	0.6	2	UG/L	
	CHLOROETHANE	5	R	U	1.5	5	UG/L	SCVMIS
	CHLOROFORM	1.5	U	U	0.75	1.5	UG/L	
	CHLOROMETHANE	6.5	R	U	0.45	6.5	UG/L	SCVMIS
	CIS-1,2-DICHLOROETHENE	4.9	F	F	0.4	6	UG/L	
	CIS-1,3-DICHLOROPROPENE	5	U	U	0.55	5	UG/L	
	DIBROMOCHLOROMETHANE	2.5	U	U	0.8	2.5	UG/L	
	DIBROMOFLUOROMETHANE	104			0.5	0.5	ERCEN	
	DIBROMOMETHANE	12	U	U	1	12	UG/L	
	DICHLORODIFLUOROMETHANI	5	R	U	1.8	5	UG/L	CV%D
	DICHLORODIFLUOROMETHANI	5	R	U	1.8	5	UG/L	SCVMIS
	ETHYLBENZENE	3	U	U	0.6	3	UG/L	
	HEXAChLOROBUTADIENE	5.5	U	U	1	5.5	UG/L	
	ISOPROPYLBENZENE	2.5	U	U	0.65	2.5	UG/L	
	m,p-xylene	6.5	U	U	1.1	6.5	UG/L	
	METHYLENE CHLORIDE	3	R	U	1.05	1.5	UG/L	CV%D
	METHYLENE CHLORIDE	3	R	U	1.05	1.5	UG/L	IC%RSI
	METHYLENE CHLORIDE	3	R	U	1.05	1.5	UG/L	BS%R
	METHYLENE CHLORIDE	3	R	U	1.05	1.5	UG/L	BD%R
	METHYLENE CHLORIDE	3	R	U	1.05	1.5	UG/L	SSCCV%
	N-PROPYLBENZENE	2	U	U	0.45	2	UG/L	
	O-XYLENE	5.5	U	U	0.65	5.5	UG/L	

6521402

9802180 SW8260A

Page 12 of 24

P-ISOPROPYL TOLUENE	6	U	U	0.45	6	UG/L	
SEC-BUTYL BENZENE	6.5	U	U	0.6	6.5	UG/L	
STYRENE	2	U	U	0.6	2	UG/L	
TERT-BUTYL BENZENE	7	U	U	0.65	7	UG/L	
TETRACHLOROETHENE	9.3			0.85	7	UG/L	
TOLUENE	5.5	U	U	0.7	5.5	UG/L	
TOLUENE-D8	103			0.5	0.5	ERCEN	
TRANS-1,2-DICHLOROETHENE	3	U	U	0.45	3	UG/L	
TRANS-1,3-DICHLOROPROPENE	5	U	U	0.85	5	UG/L	
TRICHLOROETHENE	160			0.5	5	UG/L	
TRICHLOROFLUOROMETHANE	4	R	U	1.1	4	UG/L	SCVMIS
VINYL CHLORIDE	5.5	R	U	0.8	5.5	UG/L	SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA046	1,1,1,2-TETRACHLOROETHANE	2.5	U	U	0.74	2.5	UG/L	
	1,1,1-TRICHLOROETHANE	4	U	U	0.65	4	UG/L	
	1,1,2,2-TETRACHLOROETHANE	2	U	U	0.85	2	UG/L	
	1,1,2-TRICHLOROETHANE	5	U	U	0.8	5	UG/L	
	1,1-DICHLOROETHANE	2	U	U	0.55	2	UG/L	
	1,1-DICHLOROETHENE	6	U	U	0.75	6	UG/L	
	1,1-DICHLOROPROPENE	5	U	U	0.7	5	UG/L	
	1,2,3-TRICHLOROBENZENE	1.5	U	U	0.75	1.5	UG/L	
	1,2,3-TRICHLOROPROPANE	16	U	U	0.75	16	UG/L	
	1,2,4-TRICHLOROBENZENE	2	U	U	0.65	2	UG/L	
	1,2,4-TRIMETHYLBENZENE	6.5	U	U	0.45	6.5	UG/L	
	1,2-DIBROMOETHANE	3	U	U	0.95	3	UG/L	
	1,2-DICHLOROBENZENE	1.5	U	U	0.5	1.5	UG/L	
	1,2-DICHLOROETHANE	3	U	U	1.65	3	UG/L	
	1,2-DICHLOROPROPANE	2	U	U	0.45	2	UG/L	
	1,3,5-TRIMETHYLBENZENE	2.5	U	U	0.5	2.5	UG/L	
	1,3-DICHLOROBENZENE	6	U	U	0.25	6	UG/L	
	1,3-DICHLOROPROPANE	2	U	U	0.75	2	UG/L	
	1,4-DICHLOROBENZENE	1.5	U	U	0.6	1.5	UG/L	
	1-CHLOROHEXANE	2.5	U	U	0.7	2.5	UG/L	
	2,2-DICHLOROPROPANE	18	U	U	1.6	18	UG/L	
	2-CHLOROTOLUENE	2	U	U	0.5	2	UG/L	
	4-BROMOFLUOROBENZENE	99			0.5	0.5	ERCEN	
	4-CHLOROTOLUENE	3	U	U	0.4	3	UG/L	
	BENZENE	2	U	U	0.5	2	UG/L	
	BROMOBENZENE	1.5	U	U	0.45	1.5	UG/L	
	BROMOCHLOROMETHANE	2	R	U	0.9	2	UG/L	SSCCV%
	BROMODICHLOROMETHANE	4	U	U	0.5	4	UG/L	
	BROMOFORM	6	U	U	0.9	6	UG/L	
	BROMOMETHANE	5.5	R	U	1	5.5	UG/L	CV%D
	BROMOMETHANE	5.5	R	U	1	5.5	UG/L	SCVMIS
	CARBON TETRACHLORIDE	11	U	U	0.8	11	UG/L	
	CHLOROBENZENE	2	U	U	0.6	2	UG/L	
	CHLOROETHANE	5	R	U	1.5	5	UG/L	SCVMIS
	CHLOROFORM	1.5	U	U	0.75	1.5	UG/L	
	CHLOROMETHANE	6.5	R	U	0.45	6.5	UG/L	SCVMIS
	CIS-1,2-DICHLOROETHENE	2.8	F	F	0.4	6	UG/L	
	CIS-1,3-DICHLOROPROPENE	5	U	U	0.55	5	UG/L	
	DIBROMOCHLOROMETHANE	2.5	U	U	0.8	2.5	UG/L	
	DIBROMOFLUOROMETHANE	105			0.5	0.5	ERCEN	
	DIBROMOMETHANE	12	U	U	1	12	UG/L	

6521403

9802180 SW8260A

Page 13 of 24

DICHLORODIFLUOROMETHANE	5	R	U	1.8	5	UG/L	CV%D
DICHLORODIFLUOROMETHANE	5	R	U	1.8	5	UG/L	SCVMIS
ETHYLBENZENE	3	U	U	0.6	3	UG/L	
HEXACHLOROBUTADIENE	5.5	U	U	1	5.5	UG/L	
ISOPROPYLBENZENE	2.5	U	U	0.65	2.5	UG/L	
m,p-xylene	6.5	U	U	1.1	6.5	UG/L	
METHYLENE CHLORIDE	2.3	R	U	1.05	1.5	UG/L	CV%D
METHYLENE CHLORIDE	2.3	R	U	1.05	1.5	UG/L	BS%R
METHYLENE CHLORIDE	2.3	R	U	1.05	1.5	UG/L	IC%RSI
METHYLENE CHLORIDE	2.3	R	U	1.05	1.5	UG/L	SSCCV%
METHYLENE CHLORIDE	2.3	R	U	1.05	1.5	UG/L	BD%R
N-PROPYLBENZENE	2	U	U	0.45	2	UG/L	
O-XYLENE	5.5	U	U	0.65	5.5	UG/L	
P-ISOPROPYLTOLUENE	6	U	U	0.45	6	UG/L	
SEC-BUTYLBENZENE	6.5	U	U	0.6	6.5	UG/L	
STYRENE	2	U	U	0.6	2	UG/L	
TERT-BUTYLBENZENE	7	U	U	0.65	7	UG/L	
TETRACHLOROETHENE	7	U	U	0.85	7	UG/L	
TOLUENE	5.5	U	U	0.7	5.5	UG/L	
TOLUENE-D8	102			0.5	0.5	ERCEN	
TRANS-1,2-DICHLOROETHENE	3	U	U	0.45	3	UG/L	
TRANS-1,3-DICHLOROPROPENE	5	U	U	0.85	5	UG/L	
TRICHLOROETHENE	120			0.5	5	UG/L	
TRICHLOROFLUOROMETHANE	4	R	U	1.1	4	UG/L	SCVMIS
VINYL CHLORIDE	5.5	R	U	0.8	5.5	UG/L	SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA047	1,1,1,2-TETRACHLOROETHANE	1	U	U	0.296	1	UG/L	
	1,1,1-TRICHLOROETHANE	1.6	U	U	0.26	1.6	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.8	U	U	0.34	0.8	UG/L	
	1,1,2-TRICHLOROETHANE	2	U	U	0.32	2	UG/L	
	1,1-DICHLOROETHANE	0.8	U	U	0.22	0.8	UG/L	
	1,1-DICHLOROETHENE	2.4	U	U	0.3	2.4	UG/L	
	1,1-DICHLOROPROPENE	2	U	U	0.28	2	UG/L	
	1,2,3-TRICHLOROBENZENE	0.6	U	U	0.3	0.6	UG/L	
	1,2,3-TRICHLOROPROPANE	6.4	U	U	0.3	6.4	UG/L	
	1,2,4-TRICHLOROBENZENE	0.8	U	U	0.26	0.8	UG/L	
	1,2,4-TRIMETHYLBENZENE	2.6	U	U	0.18	2.6	UG/L	
	1,2-DIBROMOETHANE	1.2	U	U	0.38	1.2	UG/L	
	1,2-DICHLOROBENZENE	0.6	U	U	0.2	0.6	UG/L	
	1,2-DICHLOROETHANE	1.2	U	U	0.66	1.2	UG/L	
	1,2-DICHLOROPROPANE	0.8	U	U	0.18	0.8	UG/L	
	1,3,5-TRIMETHYLBENZENE	1	U	U	0.2	1	UG/L	
	1,3-DICHLOROBENZENE	2.4	U	U	0.1	2.4	UG/L	
	1,3-DICHLOROPROPANE	0.8	U	U	0.3	0.8	UG/L	
	1,4-DICHLOROBENZENE	0.6	U	U	0.24	0.6	UG/L	
	1-CHLOROHEXANE	1	U	U	0.28	1	UG/L	
	2,2-DICHLOROPROPANE	7	U	U	0.64	7	UG/L	
	2-CHLOROTOLUENE	0.8	U	U	0.2	0.8	UG/L	
	4-BROMOFLUOROBENZENE	101			0.2	0.2	ERCEN	
	4-CHLOROTOLUENE	1.2	U	U	0.16	1.2	UG/L	
	BENZENE	0.8	U	U	0.2	0.8	UG/L	
	BROMOBENZENE	0.6	U	U	0.18	0.6	UG/L	
	BROMOCHLOROMETHANE	0.8	R	U	0.36	0.8	UG/L	SSCCV%
	BROMODICHLOROMETHANE	1.6	U	U	0.2	1.6	UG/L	

6521404

9802180 SW8260A

Page 14 of 24

BROMOFORM	2.4	U	U	0.36	2.4	UG/L	
BROMOMETHANE	2.2	R	U	0.4	2.2	UG/L	CV%D
BROMOMETHANE	2.2	R	U	0.4	2.2	UG/L	SCVMIS
CARBON TETRACHLORIDE	4.2	U	U	0.32	4.2	UG/L	
CHLOROBENZENE	0.8	U	U	0.24	0.8	UG/L	
CHLOROETHANE	2	R	U	0.6	2	UG/L	SCVMIS
CHLOROFORM	0.6	U	U	0.3	0.6	UG/L	
CHLOROMETHANE	2.6	R	U	0.18	2.6	UG/L	SCVMIS
CIS-1,2-DICHLOROETHENE	1.4	F	F	0.16	2.4	UG/L	
CIS-1,3-DICHLOROPROPENE	2	U	U	0.22	2	UG/L	
DIBROMOCHLOROMETHANE	1	U	U	0.32	1	UG/L	
DIBROMOFLUOROMETHANE	104			0.2	0.2	ERCEN	
DIBROMOMETHANE	4.8	U	U	0.4	4.8	UG/L	
DICHLORODIFLUOROMETHANE	2	R	U	0.72	2	UG/L	CV%D
DICHLORODIFLUOROMETHANE	2	R	U	0.72	2	UG/L	SCVMIS
ETHYLBENZENE	1.2	U	U	0.24	1.2	UG/L	
HEXACHLOROBUTADIENE	2.2	U	U	0.4	2.2	UG/L	
ISOPROPYLBENZENE	1	U	U	0.26	1	UG/L	
m,p-xylene	2.6	U	U	0.44	2.6	UG/L	
METHYLENE CHLORIDE	0.78	R	U	0.42	0.6	UG/L	BS%R
METHYLENE CHLORIDE	0.78	R	U	0.42	0.6	UG/L	SSCCV%
METHYLENE CHLORIDE	0.78	R	U	0.42	0.6	UG/L	CV%D
METHYLENE CHLORIDE	0.78	R	U	0.42	0.6	UG/L	BD%R
METHYLENE CHLORIDE	0.78	R	U	0.42	0.6	UG/L	IC%RSI
N-PROPYLBENZENE	0.8	U	U	0.18	0.8	UG/L	
O-XYLENE	2.2	U	U	0.26	2.2	UG/L	
P-ISOPROPYLtolUENE	2.4	U	U	0.18	2.4	UG/L	
SEC-BUTYLBENZENE	2.6	U	U	0.24	2.6	UG/L	
STYRENE	0.8	U	U	0.24	0.8	UG/L	
TERT-BUTYLBENZENE	2.8	U	U	0.26	2.8	UG/L	
TETRACHLOROETHENE	3.6			0.34	2.8	UG/L	
TOLUENE	2.2	U	U	0.28	2.2	UG/L	
TOLUENE-D8	104			0.2	0.2	ERCEN	
TRANS-1,2-DICHLOROETHENE	1.2	U	U	0.18	1.2	UG/L	
TRANS-1,3-DICHLOROPROPENE	2	U	U	0.34	2	UG/L	
TRICHLOROETHENE	43			0.2	2	UG/L	
TRICHLOROFUOROMETHANE	1.6	R	U	0.44	1.6	UG/L	SCVMIS
VINYL CHLORIDE	2.2	R	U	0.32	2.2	UG/L	SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA048	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.148	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	U	U	0.16	1	UG/L	
	1,1-DICHLOROETHANE	0.4	U	U	0.11	0.4	UG/L	
	1,1-DICHLOROETHENE	1.2	U	U	0.15	1.2	UG/L	
	1,1-DICHLOROPROPENE	1	U	U	0.14	1	UG/L	
	1,2,3-TRICHLOROBENZENE	0.3	U	U	0.15	0.3	UG/L	
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	U	U	0.13	0.4	UG/L	
	1,2,4-TRIMETHYLBENZENE	1.3	U	U	0.09	1.3	UG/L	
	1,2-DIBROMOETHANE	0.6	U	U	0.19	0.6	UG/L	
	1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
	1,2-DICHLOROETHANE	0.6	U	U	0.33	0.6	UG/L	
	1,2-DICHLOROPROPANE	0.4	U	U	0.09	0.4	UG/L	

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA049	1,1,1,2-TETRACHLOROETHANE	5	U	U	1.48	5	UG/L	
	1,3,5-TRIMETHYLBENZENE	0.5	U	U	0.1	0.5	UG/L	
	1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
	1,3-DICHLOROPROPANE	0.4	U	U	0.15	0.4	UG/L	
	1,4-DICHLOROBENZENE	0.3	U	U	0.12	0.3	UG/L	
	1-CHLOROHEXANE	0.5	U	U	0.14	0.5	UG/L	
	2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L	
	2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	
	4-BROMOFLUOROBENZENE	99			0.1	0.1	ERCEN	
	4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L	
	BENZENE	0.4	U	U	0.1	0.4	UG/L	
	BROMOBENZENE	0.3	U	U	0.09	0.3	UG/L	
	BROMOCHLOROMETHANE	0.4	R	U	0.18	0.4	UG/L	SSCCV%
	BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L	
	BROMOFORM	1.2	U	U	0.18	1.2	UG/L	
	BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	CV%D
	BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	SCVMIS
	CARBON TETRACHLORIDE	2.1	U	U	0.16	2.1	UG/L	
	CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	
	CHLOROETHANE	1	R	U	0.3	1	UG/L	SCVMIS
	CHLOROFORM	0.3	U	U	0.15	0.3	UG/L	
	CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	SCVMIS
	CIS-1,2-DICHLOROETHENE	2.6			0.08	1.2	UG/L	
	CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L	
	DIBROMOCHLOROMETHANE	0.5	U	U	0.16	0.5	UG/L	
	DIBROMOFLUOROMETHANE	108			0.1	0.1	ERCEN	
	DIBROMOMETHANE	2.4	U	U	0.2	2.4	UG/L	
	DICHLORODIFLUOROMETHANI	1	R	U	0.36	1	UG/L	CV%D
	DICHLORODIFLUOROMETHANI	1	R	U	0.36	1	UG/L	SCVMIS
	ETHYLBENZENE	0.6	U	U	0.12	0.6	UG/L	
	HEXAChLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L	
	ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L	
	m,p-xylene	1.3	U	U	0.22	1.3	UG/L	
	METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BS%R
	METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	SSCCV%
	METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	CV%D
	METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	IC%RSI
	METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BD%R
	N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L	
	NAPHTHALENE	0.33	J	F	0.12	0.4	UG/L	LCSDRP
	O-XYLENE	1.1	U	U	0.13	1.1	UG/L	
	P-ISOPROPYLtolUENE	1.2	U	U	0.09	1.2	UG/L	
	SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L	
	STYRENE	0.4	U	U	0.12	0.4	UG/L	
	TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L	
	TETRACHLOROETHENE	1.4	U	U	0.17	1.4	UG/L	
	TOLUENE	1.1	U	U	0.14	1.1	UG/L	
	TOLUENE-D8	100			0.1	0.1	ERCEN	
	TRANS-1,2-DICHLOROETHENE	0.6	U	U	0.09	0.6	UG/L	
	TRANS-1,3-DICHLOROPROPENE	1	U	U	0.17	1	UG/L	
	TRICHLOROETHENE	26			0.1	1	UG/L	SCVMIS
	TRICHLOROFLUOROMETHANE	0.8	R	U	0.22	0.8	UG/L	SCVMIS
	VINYL CHLORIDE	1.1	R	U	0.16	1.1	UG/L	

	1,1,1-TRICHLOROETHANE	8	U	U	1.3	8	UG/L
	1,1,2,2-TETRACHLOROETHANE	4	U	U	1.7	4	UG/L
	1,1,2-TRICHLOROETHANE	10	U	U	1.6	10	UG/L
	1,1-DICHLOROETHANE	4	U	U	1.1	4	UG/L
	1,1-DICHLOROETHENE	12	U	U	1.5	12	UG/L
	1,1-DICHLOROPROPENE	10	U	U	1.4	10	UG/L
	1,2,3-TRICHLOROBENZENE	3	U	U	1.5	3	UG/L
	1,2,3-TRICHLOROPROPANE	32	U	U	1.5	32	UG/L
	1,2,4-TRICHLOROBENZENE	4	U	U	1.3	4	UG/L
	1,2,4-TRIMETHYLBENZENE	13	U	U	0.9	13	UG/L
	1,2-DIBROMOETHANE	6	U	U	1.9	6	UG/L
	1,2-DICHLOROBENZENE	3	U	U	1	3	UG/L
	1,2-DICHLOROETHANE	6	U	U	3.3	6	UG/L
	1,2-DICHLOROPROPANE	4	U	U	0.9	4	UG/L
	1,3,5-TRIMETHYLBENZENE	5	U	U	1	5	UG/L
	1,3-DICHLOROBENZENE	12	U	U	0.5	12	UG/L
	1,3-DICHLOROPROPANE	4	U	U	1.5	4	UG/L
	1,4-DICHLOROBENZENE	3	U	U	1.2	3	UG/L
	1-CHLOROHEXANE	5	U	U	1.4	5	UG/L
	2,2-DICHLOROPROPANE	35	U	U	3.2	35	UG/L
	2-CHLOROTOLUENE	4	U	U	1	4	UG/L
	4-BROMOFLUOROBENZENE	99			1	1	ERCEN
	4-CHLOROTOLUENE	6	U	U	0.8	6	UG/L
	BENZENE	4	U	U	1	4	UG/L
	BROMOBENZENE	3	U	U	0.9	3	UG/L
	BROMOCHLOROMETHANE	4	R	U	1.8	4	UG/L
	BROMODICHLOROMETHANE	8	U	U	1	8	UG/L
	BROMOFORM	12	U	U	1.8	12	UG/L
	BROMOMETHANE	11	R	U	2	11	UG/L
	BROMOMETHANE	11	R	U	2	11	UG/L
	CARBON TETRACHLORIDE	21	U	U	1.6	21	UG/L
	CHLOROBENZENE	4	U	U	1.2	4	UG/L
	CHLOROETHANE	10	R	U	-3	10	UG/L
	CHLOROFORM	3	U	U	1.5	3	UG/L
	CHLOROMETHANE	13	R	U	0.9	13	UG/L
	CIS-1,2-DICHLOROETHENE	54			0.8	12	UG/L
	CIS-1,3-DICHLOROPROPENE	10	U	U	1.1	10	UG/L
	DIBROMOCHLOROMETHANE	5	U	U	1.6	5	UG/L
	DIBROMOFLUOROMETHANE	108			1	1	ERCEN
	DIBROMOMETHANE	24	U	U	2	24	UG/L
	DICHLORODIFLUOROMETHANE	10	R	U	3.6	10	UG/L
	DICHLORODIFLUOROMETHANE	10	R	U	3.6	10	UG/L
	ETHYLBENZENE	6	U	U	1.2	6	UG/L
	HEXAChLOROBUTADIENE	11	U	U	2	11	UG/L
	ISOPROPYLBENZENE	5	U	U	1.3	5	UG/L
	m,p-xylene	13	U	U	2.2	13	UG/L
	METHYLENE CHLORIDE	6.8	R	U	2.1	3	UG/L
	METHYLENE CHLORIDE	6.8	R	U	2.1	3	UG/L
	METHYLENE CHLORIDE	6.8	R	U	2.1	3	UG/L
	METHYLENE CHLORIDE	6.8	R	U	2.1	3	UG/L
	N-PROPYLBENZENE	4	U	U	0.9	4	UG/L
	O-XYLENE	11	U	U	1.3	11	UG/L
	P-ISOPROPYLtolUENE	12	U	U	0.9	12	UG/L
	SEC-BUTYLBENZENE	13	U	U	1.2	13	UG/L
	STYRENE	4	U	U	1.2	4	UG/L

TERT-BUTYLBENZENE	14	U	U	13	14	UG/L
TETRACHLOROETHENE	14	U	U	17	14	UG/L
TOLUENE	11	U	U	14	11	UG/L
TOLUENE-D8	98			1	1	ERCEN
TRANS-1,2-DICHLOROETHENE	6	U	U	0.9	6	UG/L
TRANS-1,3-DICHLOROPROPENE	10	U	U	17	10	UG/L
TRICHLOROETHENE	220			1	10	UG/L
TRICHLOROFUOROMETHANE	8	R	U	2.2	8	UG/L
VINYL CHLORIDE	11	R	U	1.6	11	UG/L
						SCVMIS
						SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA050	1,1,1,2-TETRACHLOROETHANE	10	U	U	2.96	10	UG/L	
	1,1,1-TRICHLOROETHANE	16	U	U	2.6	16	UG/L	
	1,1,2,2-TETRACHLOROETHANE	8	U	U	3.4	8	UG/L	
	1,1,2-TRICHLOROETHANE	20	U	U	3.2	20	UG/L	
	1,1-DICHLOROETHANE	8	U	U	2.2	8	UG/L	
	1,1-DICHLOROETHENE	24	U	U	3	24	UG/L	
	1,1-DICHLOROPROPENE	20	U	U	2.8	20	UG/L	
	1,2,3-TRICHLOROBENZENE	6	U	U	3	6	UG/L	
	1,2,3-TRICHLOROPROPANE	64	U	U	3	64	UG/L	
	1,2,4-TRICHLOROBENZENE	8	U	U	2.6	8	UG/L	
	1,2,4-TRIMETHYLBENZENE	26	U	U	1.8	26	UG/L	
	1,2-DIBROMOETHANE	12	U	U	3.8	12	UG/L	
	1,2-DICHLOROBENZENE	6	U	U	2	6	UG/L	
	1,2-DICHLOROETHANE	12	U	U	6.6	12	UG/L	
	1,2-DICHLOROPROPANE	8	U	U	1.8	8	UG/L	
	1,3,5-TRIMETHYLBENZENE	10	U	U	2	10	UG/L	
	1,3-DICHLOROBENZENE	24	U	U	1	24	UG/L	
	1,3-DICHLOROPROPANE	8	U	U	3	8	UG/L	
	1,4-DICHLOROBENZENE	6	U	U	2.4	6	UG/L	
	1-CHLOROHEXANE	10	U	U	2.8	10	UG/L	
	2,2-DICHLOROPROPANE	70	U	U	6.4	70	UG/L	
	2-CHLOROTOLUENE	8	U	U	2	8	UG/L	
	4-BROMOFLUOROBENZENE	96			2	2	ERCEN	
	4-CHLOROTOLUENE	12	U	U	1.6	12	UG/L	
	BENZENE	8	U	U	2	8	UG/L	
	BROMOBENZENE	6	U	U	1.8	6	UG/L	
	BROMOCHLOROMETHANE	8	R	U	3.6	8	UG/L	SSCCV%
	BROMODICHLOROMETHANE	16	U	U	2	16	UG/L	
	BROMOFORM	24	U	U	3.6	24	UG/L	
	BROMOMETHANE	22	R	U	4	22	UG/L	CV%D
	BROMOMETHANE	22	R	U	4	22	UG/L	SCVMIS
	CARBON TETRACHLORIDE	42	U	U	3.2	42	UG/L	
	CHLOROBENZENE	8	U	U	2.4	8	UG/L	
	CHLOROETHANE	20	R	U	6	20	UG/L	SCVMIS
	CHLOROFORM	6	U	U	3	6	UG/L	
	CHLOROMETHANE	26	R	U	1.8	26	UG/L	SCVMIS
	CIS-1,2-DICHLOROETHENE	29			1.6	24	UG/L	
	CIS-1,3-DICHLOROPROPENE	20	U	U	2.2	20	UG/L	
	DIBROMOCHLOROMETHANE	10	U	U	3.2	10	UG/L	
	DIBROMOFLUOROMETHANE	107			2	2	ERCEN	
	DIBROMOMETHANE	48	U	U	4	48	UG/L	
	DICHLORODIFLUOROMETHANE	20	R	U	7.2	20	UG/L	CV%D
	DICHLORODIFLUOROMETHANE	20	R	U	7.2	20	UG/L	SCVMIS
	ETHYLBENZENE	12	U	U	2.4	12	UG/L	

6521408

9802180 SW8260A

Page 18 of 24

HEXACHLOROBUTADIENE	22	U	U	4	22	UG/L	
ISOPROPYLBENZENE	10	U	U	2.6	10	UG/L	
m,p-xylene	26	U	U	4.4	26	UG/L	
METHYLENE CHLORIDE	13	R		4.2	6	UG/L	IC%RSI
METHYLENE CHLORIDE	13	R		4.2	6	UG/L	CV%D
METHYLENE CHLORIDE	13	R		4.2	6	UG/L	SSCCV%
N-PROPYLBENZENE	8	U	U	1.8	8	UG/L	
O-XYLENE	22	U	U	2.6	22	UG/L	
P-ISOPROPYLtolUENE	24	U	U	1.8	24	UG/L	
SEC-BUTYLBENZENE	26	U	U	2.4	26	UG/L	
STYRENE	8	U	U	2.4	8	UG/L	
TERT-BUTYLBENZENE	28	U	U	2.6	28	UG/L	
TETRACHLOROETHENE	28	U	U	3.4	28	UG/L	
TOLUENE	22	U	U	2.8	22	UG/L	
TOLUENE-D8	99			2	2	ERCEN	
TRANS-1,2-DICHLOROETHENE	12	U	U	1.8	12	UG/L	
TRANS-1,3-DICHLOROPROPENE	20	U	U	3.4	20	UG/L	
TRICHLOROETHENE	360			2	20	UG/L	
TRICHLOROFUOROMETHANE	16	R	U	4.4	16	UG/L	SCVMIS
VINYL CHLORIDE	22	R	U	3.2	22	UG/L	SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA051	1,1,1,2-TETRACHLOROETHANE	1	U	U	0.296	1	UG/L	
	1,1,1-TRICHLOROETHANE	16	U	U	0.26	1.6	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.8	U	U	0.34	0.8	UG/L	
	1,1,2-TRICHLOROETHANE	2	U	U	0.32	2	UG/L	
	1,1-DICHLOROETHANE	0.8	U	U	0.22	0.8	UG/L	
	1,1-DICHLOROETHENE	2.4	U	U	0.3	2.4	UG/L	
	1,1-DICHLOROPROPENE	2	U	U	0.28	2	UG/L	
	1,2,3-TRICHLOROBENZENE	0.6	U	U	0.3	0.6	UG/L	
	1,2,3-TRICHLOROPROPANE	6.4	U	U	0.3	6.4	UG/L	
	1,2,4-TRICHLOROBENZENE	0.8	U	U	0.26	0.8	UG/L	
	1,2,4-TRIMETHYLBENZENE	2.6	U	U	0.18	2.6	UG/L	
	1,2-DIBROMOETHANE	1.2	U	U	0.38	1.2	UG/L	
	1,2-DICHLOROBENZENE	0.6	U	U	0.2	0.6	UG/L	
	1,2-DICHLOROETHANE	1.2	U	U	0.66	1.2	UG/L	
	1,2-DICHLOROPROPANE	0.8	U	U	0.18	0.8	UG/L	
	1,3,5-TRIMETHYLBENZENE	1	U	U	0.2	1	UG/L	
	1,3-DICHLOROBENZENE	2.4	U	U	0.1	2.4	UG/L	
	1,3-DICHLOROPROPANE	0.8	U	U	0.3	0.8	UG/L	
	1,4-DICHLOROBENZENE	0.6	U	U	0.24	0.6	UG/L	
	1-CHLOROHEXANE	1	U	U	0.28	1	UG/L	
	2,2-DICHLOROPROPANE	7	U	U	0.64	7	UG/L	
	2-CHLOROTOLUENE	0.8	U	U	0.2	0.8	UG/L	
	4-BROMOFLUOROBENZENE	99			0.2	0.2	ERCEN	
	4-CHLOROTOLUENE	1.2	U	U	0.16	1.2	UG/L	
	BENZENE	0.8	U	U	0.2	0.8	UG/L	
	BROMOBENZENE	0.6	U	U	0.18	0.6	UG/L	
	BROMOCHLOROMETHANE	0.8	R	U	0.36	0.8	UG/L	SSCCV%
	BROMODICHLOROMETHANE	1.6	U	U	0.2	1.6	UG/L	
	BROMOFORM	2.4	U	U	0.36	2.4	UG/L	
	BROMOMETHANE	2.2	R	U	0.4	2.2	UG/L	CV%D
	BROMOMETHANE	2.2	R	U	0.4	2.2	UG/L	SCVMIS
	CARBON TETRACHLORIDE	4.2	U	U	0.32	4.2	UG/L	
	CHLOROBENZENE	0.8	U	U	0.24	0.8	UG/L	

6521409

CHLOROETHANE	2	R	U	0.6	2	UG/L	SCVMIS
CHLOROFORM	0.6	U	U	0.3	0.6	UG/L	
CHLOROMETHANE	2.6	R	U	0.18	2.6	UG/L	SCVMIS
CIS-1,2-DICHLOROETHENE	2	F	F	0.16	2.4	UG/L	
CIS-1,3-DICHLOROPROPENE	2	U	U	0.22	2	UG/L	
DIBROMOCHLOROMETHANE	1	U	U	0.32	1	UG/L	
DIBROMOFLUOROMETHANE	101			0.2	0.2	ERCEN	
DIBROMOMETHANE	4.8	U	U	0.4	4.8	UG/L	
DICHLORODIFLUOROMETHANE	2	R	U	0.72	2	UG/L	CV%D
DICHLORODIFLUOROMETHANE	2	R	U	0.72	2	UG/L	SCVMIS
ETHYLBENZENE	1.2	U	U	0.24	1.2	UG/L	
HEXACHLOROBUTADIENE	2.2	U	U	0.4	2.2	UG/L	
ISOPROPYLBENZENE	1	U	U	0.26	1	UG/L	
m,p-xylene	2.6	U	U	0.44	2.6	UG/L	
METHYLENE CHLORIDE	1	R	U	0.42	0.6	UG/L	IC%RSI
METHYLENE CHLORIDE	1	R	U	0.42	0.6	UG/L	SSCCV%
METHYLENE CHLORIDE	1	R	U	0.42	0.6	UG/L	CV%D
METHYLENE CHLORIDE	1	R	U	0.42	0.6	UG/L	BS%R
METHYLENE CHLORIDE	1	R	U	0.42	0.6	UG/L	BD%R
N-PROPYLBENZENE	0.8	U	U	0.18	0.8	UG/L	
O-XYLENE	2.2	U	U	0.26	2.2	UG/L	
P-ISOPROPYLtolUENE	2.4	U	U	0.18	2.4	UG/L	
SEC-BUTYLBENZENE	2.6	U	U	0.24	2.6	UG/L	
STYRENE	0.8	U	U	0.24	0.8	UG/L	
TERT-BUTYLBENZENE	2.8	U	U	0.26	2.8	UG/L	
TETRACHLOROETHENE	2.8	U	U	0.34	2.8	UG/L	
TOLUENE	2.2	U	U	0.28	2.2	UG/L	
TOLUENE-D8	101			0.2	0.2	ERCEN	
TRANS-1,2-DICHLOROETHENE	1.2	U	U	0.18	1.2	UG/L	
TRANS-1,3-DICHLOROPROPENE	2	U	U	0.34	2	UG/L	
TRICHLOROETHENE	53			0.2	2	UG/L	
TRICHLOROFLUOROMETHANE	1.6	R	U	0.44	1.6	UG/L	SCVMIS
VINYL CHLORIDE	2.2	R	U	0.32	2.2	UG/L	SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA052	1,1,1,2-TETRACHLOROETHANE	10	U	U	2.96	10	UG/L	
	1,1,1-TRICHLOROETHANE	16	U	U	2.6	16	UG/L	
	1,1,2,2-TETRACHLOROETHANE	8	U	U	3.4	8	UG/L	
	1,1,2-TRICHLOROETHANE	20	U	U	3.2	20	UG/L	
	1,1-DICHLOROETHANE	8	U	U	2.2	8	UG/L	
	1,1-DICHLOROETHENE	24	U	U	3	24	UG/L	
	1,1-DICHLOROPROPENE	20	U	U	2.8	20	UG/L	
	1,2,3-TRICHLOROBENZENE	6	U	U	3	6	UG/L	
	1,2,3-TRICHLOROPROPANE	64	U	U	3	64	UG/L	
	1,2,4-TRICHLOROBENZENE	8	U	U	2.6	8	UG/L	
	1,2,4-TRIMETHYLBENZENE	26	U	U	1.8	26	UG/L	
	1,2-DIBROMOETHANE	12	U	U	3.8	12	UG/L	
	1,2-DICHLOROBENZENE	6	U	U	2	6	UG/L	
	1,2-DICHLOROETHANE	12	U	U	6.6	12	UG/L	
	1,2-DICHLOROPROPANE	8	U	U	1.8	8	UG/L	
	1,3,5-TRIMETHYLBENZENE	10	U	U	2	10	UG/L	
	1,3-DICHLOROBENZENE	24	U	U	1	24	UG/L	
	1,3-DICHLOROPROPANE	8	U	U	3	8	UG/L	
	1,4-DICHLOROBENZENE	6	U	U	2.4	6	UG/L	
	1-CHLOROHEXANE	10	U	U	2.8	10	UG/L	

6521410

9802180 SW8260A

Page 20 of 24

	2,2-DICHLOROPROPANE	70	U	U	6.4	70	UG/L	
	2-CHLOROTOLUENE	8	U	U	2	8	UG/L	
	4-BROMOFLUOROBENZENE	101			2	2	ERCEN	
	4-CHLOROTOLUENE	12	U	U	1.6	12	UG/L	
	BENZENE	8	U	U	2	8	UG/L	
	BROMOBENZENE	6	U	U	1.8	6	UG/L	
	BROMOCHLOROMETHANE	8	R	U	3.6	8	UG/L	SSCCV%
	BROMODICHLOROMETHANE	16	U	U	2	16	UG/L	
	BROMOFORM	24	U	U	3.6	24	UG/L	
	BROMOMETHANE	22	R	U	4	22	UG/L	CV%D
	BROMOMETHANE	22	R	U	4	22	UG/L	SCVMIS
	CARBON TETRACHLORIDE	42	U	U	3.2	42	UG/L	
	CHLOROBENZENE	8	U	U	2.4	8	UG/L	
	CHLOROETHANE	20	R	U	6	20	UG/L	SCVMIS
	CHLOROFORM	6	U	U	3	6	UG/L	
	CHLORMETHANE	26	R	U	1.8	26	UG/L	SCVMIS
	CIS-1,2-DICHLOROETHENE	81			1.6	24	UG/L	
	CIS-1,3-DICHLOROPROPENE	20	U	U	2.2	20	UG/L	
	DIBROMOCHLOROMETHANE	10	U	U	3.2	10	UG/L	
	DIBROMOFLUOROMETHANE	104			2	2	ERCEN	
	DIBROMOMETHANE	48	U	U	4	48	UG/L	
	DICHLORODIFLUOROMETHANI	20	R	U	7.2	20	UG/L	CV%D
	DICHLORODIFLUOROMETHANI	20	R	U	7.2	20	UG/L	SCVMIS
	ETHYLBENZENE	12	U	U	2.4	12	UG/L	
	HEXAChLOROBUTADIENE	22	U	U	4	22	UG/L	
	ISOPROPYLBENZENE	10	U	U	2.6	10	UG/L	
	m,p-xylene	26	U	U	4.4	26	UG/L	
	METHYLENE CHLORIDE	11	R		4.2	6	UG/L	CV%D
	METHYLENE CHLORIDE	11	R		4.2	6	UG/L	IC%RSI
	METHYLENE CHLORIDE	11	R		4.2	6	UG/L	SSCCV%
	N-PROPYLBENZENE	8	U	U	1.8	8	-UG/L	
	O-XYLENE	22	U	U	2.6	22	UG/L	
	P-ISOPROPYLtolUENE	24	R	U	1.8	24	UG/L	
	SEC-BUTYLBENZENE	26	U	U	2.4	26	UG/L	
	STYRENE	8	U	U	2.4	8	UG/L	
	TERT-BUTYLBENZENE	28	U	U	2.6	28	UG/L	
	TETRACHLOROETHENE	28	U	U	3.4	28	UG/L	
	TOLUENE	22	U	U	2.8	22	UG/L	
	TOLUENE-D8	102			2	2	ERCEN	
	TRANS-1,2-DICHLOROETHENE	12	U	U	1.8	12	UG/L	
	TRANS-1,3-DICHLOROPROPENE	20	U	U	3.4	20	UG/L	
	TRICHLOROETHENE	360			2	20	UG/L	
	TRICHLOROFUOROMETHANE	16	R	U	4.4	16	UG/L	SCVMIS
	VINYL CHLORIDE	22	R	U	3.2	22	UG/L	SCVMIS

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIA053	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.148	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.13	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.17	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	U	U	0.16	1	UG/L	
	1,1-DICHLOROETHANE	0.4	U	U	0.11	0.4	UG/L	
	1,1-DICHLOROETHENE	1.2	U	U	0.15	1.2	UG/L	
	1,1-DICHLOROPROPENE	1	U	U	0.14	1	UG/L	
	1,2,3-TRICHLOROBENZENE	0.3	U	U	0.15	0.3	UG/L	
	1,2,3-TRICHLOROPROPANE	3.2	U	U	0.15	3.2	UG/L	

1,2,4-TRICHLOROBENZENE	0.4	U	U	0.13	0.4	UG/L	
1,2,4-TRIMETHYLBENZENE	1.3	U	U	0.09	1.3	UG/L	
1,2-DIBROMOETHANE	0.6	U	U	0.19	0.6	UG/L	
1,2-DICHLOROBENZENE	0.3	U	U	0.1	0.3	UG/L	
1,2-DICHLOROETHANE	0.6	U	U	0.33	0.6	UG/L	
1,2-DICHLOROPROPANE	0.4	U	U	0.09	0.4	UG/L	
1,3,5-TRIMETHYLBENZENE	0.5	U	U	0.1	0.5	UG/L	
1,3-DICHLOROBENZENE	1.2	U	U	0.05	1.2	UG/L	
1,3-DICHLOROPROPANE	0.4	U	U	0.15	0.4	UG/L	
1,4-DICHLOROBENZENE	0.3	U	U	0.12	0.3	UG/L	
1-CHLOROHEXANE	0.5	U	U	0.14	0.5	UG/L	
2,2-DICHLOROPROPANE	3.5	U	U	0.32	3.5	UG/L	
2-CHLOROTOLUENE	0.4	U	U	0.1	0.4	UG/L	
4-BROMOFLUOROBENZENE	98			0.1	0.1	ERCEN	
4-CHLOROTOLUENE	0.6	U	U	0.08	0.6	UG/L	
BENZENE	0.4	U	U	0.1	0.4	UG/L	
BROMOBENZENE	0.3	U	U	0.09	0.3	UG/L	
BROMOCHLOROMETHANE	0.4	R	U	0.18	0.4	UG/L	SSCCV%
BROMODICHLOROMETHANE	0.8	U	U	0.1	0.8	UG/L	
BROMOFORM	1.2	U	U	0.18	1.2	UG/L	
BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	SCVMIS
BROMOMETHANE	1.1	R	U	0.2	1.1	UG/L	CV%D
CARBON TETRACHLORIDE	2.1	U	U	0.16	2.1	UG/L	
CHLOROBENZENE	0.4	U	U	0.12	0.4	UG/L	
CHLOROETHANE	1	R	U	0.3	1	UG/L	SCVMIS
CHLOROFORM	0.3	U	U	0.15	0.3	UG/L	
CHLOROMETHANE	1.3	R	U	0.09	1.3	UG/L	SCVMIS
CIS-1,2-DICHLOROETHENE	1.2	U	U	0.08	1.2	UG/L	
CIS-1,3-DICHLOROPROPENE	1	U	U	0.11	1	UG/L	
DIBROMOCHLOROMETHANE	0.5	U	U	0.16	0.5	UG/L	
DIBROMOFLUOROMETHANE	105			0.1	0.1	ERCEN	
DIBROMOMETHANE	2.4	U	U	0.2	2.4	UG/L	
DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L	CV%D
DICHLORODIFLUOROMETHANE	1	R	U	0.36	1	UG/L	SCVMIS
ETHYL BENZENE	0.6	U	U	0.12	0.6	UG/L	
HEXACHLOROBUTADIENE	1.1	U	U	0.2	1.1	UG/L	
ISOPROPYLBENZENE	0.5	U	U	0.13	0.5	UG/L	
m,p-xylene	1.3	U	U	0.22	1.3	UG/L	
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BD%R
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	BS%R
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	CV%D
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	IC%RSI
METHYLENE CHLORIDE	0.3	R	U	0.21	0.3	UG/L	SSCCV%
N-PROPYLBENZENE	0.4	U	U	0.09	0.4	UG/L	
O-XYLENE	1.1	U	U	0.13	1.1	UG/L	
P-ISOPROPYLtoluene	1.2	U	U	0.09	1.2	UG/L	
SEC-BUTYLBENZENE	1.3	U	U	0.12	1.3	UG/L	
STYRENE	0.4	U	U	0.12	0.4	UG/L	
TERT-BUTYLBENZENE	1.4	U	U	0.13	1.4	UG/L	
TETRACHLOROETHENE	1.4	U	U	0.17	1.4	UG/L	
TOLUENE	1.1	U	U	0.14	1.1	UG/L	
TOLUENE-D8	104			0.1	0.1	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.6	U	U	0.09	0.6	UG/L	
TRANS-1,3-DICHLOROPROPENE	1	U	U	0.17	1	UG/L	
TRICHLOROETHENE	0.97	F	J	0.1	1	UG/L	
TRICHLOROFUOROMETHANE	0.8	R	U	0.22	0.8	UG/L	SCVMIS

6521412

9802180 SW8260A

Page 22 of 24

VINYL CHLORIDE	11	R	U	0.16	11	UG/L	SCVMIS
----------------	----	---	---	------	----	------	--------

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not requested
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriate flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

6521414

9802180 SW8260A

Page 24 of 24

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Tnp blank
TB<RL	Tnp blank concentration less than RL
TB>RL	Tnp blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISFlag	Lab R flag removed; Re-analysis confirmed-matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria
SCVMISS	Missing target analyte

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL)

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

6521415

NAS FW JRB AOC 2**Data Quality Evaluation****CH2MHILL**

SDG 9804159 Method SW8260A

Reviewer mhc Date 5/31/98 Matrix Water

Senior Review Vito D'Aurora

Field Samples

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
-----------------	------------------	-----------------	------------------	-----------------	------------------

Water

AIB001TB1	TB	AIB002EB1	EB	AIB003	N
AIB004FD1	FD	AIB005	N	LABQC	BD

**1. Case Narrative –
Items of Interest**

1. Methylene Chloride was detected > the RL in the method blank. This compound was detected < the calculated value in samples 3, 4, & 5, so the data were flagged U (by the lab).
2. All LCS/LCD recoveries and RPDs were within acceptance criteria with the exception of Methylene Chloride in the LCS/LCD and 1-chlorhexane in the LCS > UCL. The background levels of Methylene chloride detected in this laboratory can cause inconsistent and irreproducible results for low level analyses. 1-Chlorohexane was not detected in the samples.
3. All initial calibration criteria were within acceptance criteria. Method SW8260B states any compound exceeding 15% RSD criteria should be analyzed with a higher order curve such as a quadratic. We quantitated these compounds using the average response factor due to a software programming problem associated with Hewlett-Packard MSDs. The manufacturer is now aware of the problem and is working on a solution.

2. Blank Summary

Field Blanks No target analytes detected >RL in either the trip blank or equipment blank.

Method Blanks 1. Methylene Chloride was detected > the RL in the method blank. This compound was detected < the calculated value in samples 3, 4, & 5, so the data were flagged U (by the lab).

6521416

9804159 SW8260A

Page 2 of 9

<u>Blank Type</u>	<u>Blank ID</u>	<u>Analyte</u>	<u>Result</u>	<u>ReportLimit</u>	<u>LabFlag</u>	<u>Units</u>
LB	LABQC	METHYLENE CHLORI	0.38	0.3		UG/L

3. Spikes and Duplicates**Field Duplicates** All criteria met.**Laboratory Duplicates** None in this SDG.**Matrix Spike** None in this SDG.**4. Laboratory Control Sample**

1. The LCS/LCD recovered < LCL for Methylene Chloride and > UCL 1-chlorohexane and 1, 3, 5-trimethylbenzene. The MeCl results were J flagged for detects and R flagged for non-detects. 1-Chlorohexane and 1,3,5-trimethylbenzene were not detected in the samples and the data was not qualified.

<u>Matrix</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>Analyte</u>	<u>Recovery</u>	<u>LowerLimit</u>	<u>UpperLimit</u>
WATER	BS	LABQC	1,3,5-TRIMETHYLBENZEN	115	72	112
WATER	BS	LABQC	1-CHLOROHEXANE	126	75	125
WATER	BS	LABQC	METHYLENE CHLORIDE	73	75	125
WATER	BD	LABQC	METHYLENE CHLORIDE	60	75	125

5. Surrogates

All criteria were met.

6. Tuning and Mass Calibration

All criteria met.

7. Internal Standard

All internal standard recoveries were within acceptance criteria.

8. Calibration Information

- Initial Calibration** 1. Methylene chloride exceeded the RSD criteria and the associated sample results have been R flagged.

<u>Field ID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation Reason</u>
AIB003	METHYLENE CHLORIDE	R	IC%RSD

9804159 SW8260A

Page 3 of 9

AIB004FD1	METHYLENE CHLORIDE	R	IC%RSD
AIB005	METHYLENE CHLORIDE	R	IC%RSD

- Continuing Calibration**
1. The analytes bromochloromethane and 1-chlorohexane are missing from the SSCV from 3/31/98. MeCl exceeded 25%D. The associated sample results were validated with an R flag.
 2. The CCV of 4/29/98 exceeded 25%D for the analyte MeCl and the associated sample results were validated with an R flag.

<u>Field ID</u>	<u>LabsampleID</u>	<u>Analyte</u>	<u>Validation Flag</u>	<u>Validation</u>
AIB003	9804159-3	METHYLENE CHLORIDE	R	CV%D
AIB004FD1	9804159-4	METHYLENE CHLORIDE	R	CV%D
AIB005	9804159-5	METHYLENE CHLORIDE	R	CV%D

9. Holding Time

Holding times were met.

10. Summary

- General Comments**
1. The LCS/LCD recovered < LCL for Methylene Chloride and > UCL 1-chlorohexane and 1, 3, 5-trimethylbenzene. The Methylene chloride results were J flagged for detects and R flagged for non-detects. 1-Chlorohexane and 1,3,5-trimethylbenzene were not detected in the samples and the data was not qualified.
 2. Methylene chloride exceeded the RSD criteria and the associated sample results have been R flagged.
 3. The analytes bromochloromethane and 1-chlorohexane are missing from the SSCV from 3/31/98. MeCl exceeded 25%D. The associated sample results were validated with an R flag.
 4. The CCV of 4/29/98 exceeded 25%D for the analyte MeCl and the associated sample results were validated with an R flag.

Data Package Completeness

1. There is no demonstration of a MDL being completed within 1yr.
2. The edata concual field is incomplete.
3. There is no documentation in the case narrative covering the LCS>UCL for 1,3,5-trimethylbenzene.
4. There is no documentation in the case narrative covering the SSCV and CCV exceedances.
5. All requested analyses completed as defined by the COC and any exception reports.

Forms Review/ Items of Interest

No target analytes were detected > RL in any of the samples.

COC Review

All necessary chain of custody procedures were adhered to and the documentation is complete.

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIB003	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.5	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.8	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.4	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	U	U	1	1	UG/L	
	1,1-DICHLOROETHANE	0.4	U	U	0.4	0.4	UG/L	
	1,1-DICHLOROETHENE	1.2	U	U	1.2	1.2	UG/L	
	1,1-DICHLOROPROPENE	1	U	U	1	1	UG/L	
	1,2,3-TRICHLOROBENZENE	0.3	U	U	0.3	0.3	UG/L	
	1,2,3-TRICHLOROPROPANE	3.2	U	U	3.2	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	U	U	0.4	0.4	UG/L	
	1,2,4-TRIMETHYLBENZENE	1.3	U	U	1.3	1.3	UG/L	
	2-DIBROMO-3-CHLOROPROPANE	2.6	U	U	2.6	2.6	UG/L	
	1,2-DIBROMOETHANE	0.6	U	U	0.6	— 0.6	UG/L	
	1,2-DICHLOROBENZENE	0.3	U	U	0.3	0.3	UG/L	
	1,2-DICHLOROETHANE	0.6	U	U	0.6	0.6	UG/L	
	1,2-DICHLOROETHANE-D4	105			0.5	0.5	ERCEN	
	1,2-DICHLOROPROPANE	0.4	U	U	0.4	0.4	UG/L	
	1,3-DICHLOROBENZENE	1.2	U	U	1.2	1.2	UG/L	
	1,3-DICHLOROPROPANE	0.4	U	U	0.4	0.4	UG/L	
	1,4-DICHLOROBENZENE	0.3	U	U	0.3	0.3	UG/L	
	1-CHLOROHEXANE	0.5	R	U	0.5	0.5	UG/L	SCVMIS
	2,2-DICHLOROPROPANE	3.5	U	U	3.5	3.5	UG/L	
	2-CHLOROTOLUENE	0.4	—	U	0.4	0.4	UG/L	
	4-BROMOFLUOROBENZENE	— 92			0.1	0.1	ERCEN	
	4-CHLOROTOLUENE	0.6	U	U	— 0.6	0.6	UG/L	
	BENZENE	0.4	U	U	0.4	0.4	UG/L	
	BROMOBENZENE	0.3	U	U	0.3	0.3	UG/L	
	BROMOCHLOROMETHANE	0.4	R	U	0.4	0.4	UG/L	SCVMIS
	BROMODICHLOROMETHANE	0.8	U	U	0.8	0.8	UG/L	
	BROMOFORM	1.2	—	U	1.2	1.2	UG/L	
	BROMOMETHANE	1.1	U	U	1.1	1.1	UG/L	
	CARBON TETRACHLORIDE	2.1	U	U	2.1	2.1	UG/L	
	CHLOROBENZENE	0.4	U	U	0.4	0.4	UG/L	
	CHLOROETHANE	1	U	U	1	1	UG/L	
	CHLOROFORM	0.3	U	U	0.3	0.3	UG/L	
	CHLOROMETHANE	1.3	U	U	1.3	1.3	UG/L	
	CIS-1,2-DICHLOROETHENE	1.2	U	U	1.2	1.2	UG/L	
	CIS-1,3-DICHLOROPROPENE	1	U	U	1	1	UG/L	
	DIBROMOCHLOROMETHANE	0.5	U	U	0.5	0.5	UG/L	
	DIBROMOFLUOROMETHANE	100			0.1	0.1	ERCEN	
	DIBROMOMETHANE	2.4	U	U	2.4	2.4	UG/L	
	DICHLORODIFLUOROMETHANE	1	U	U	1	1	UG/L	
	ETHYLBENZENE	0.6	U	U	0.6	0.6	UG/L	
	HEXAChLOROBUTADIENE	1.1	U	U	1.1	1.1	UG/L	
	ISOPROPYLBENZENE	0.5	U	U	0.5	0.5	UG/L	
	M+P-XYLENE	1.3	U	U	1.3	1.3	UG/L	
	METHYLENE CHLORIDE	0.53	R	U	0.3	0.3	UG/L	BS%R

U.M.G.13
6521419

9804159 SW8260A

Page 5 of 9

METHYLENE CHLORIDE	0.53	R	U	0.3	0.3	UG/L	CV%D
METHYLENE CHLORIDE	0.53	R	U	0.3	0.3	UG/L	IC%RSI
METHYLENE CHLORIDE	0.53	R	U	0.3	0.3	UG/L	SSCCV%
METHYLENE CHLORIDE	0.53	R	U	0.3	0.3	UG/L	BD%
N-BUTYLBENZENE	1.1	U	U	1.1	1.1	UG/L	
N-PROPYLBENZENE	0.4	U	U	0.4	0.4	UG/L	
NAPHTHALENE	0.4	U	U	0.4	0.4	UG/L	
O-XYLENE	1.1	U	U	1.1	1.1	UG/L	
P-ISOPROPYLTOLUENE	1.2	U	U	1.2	1.2	UG/L	
SEC-BUTYLBENZENE	1.3	U	U	1.3	1.3	UG/L	
STYRENE	0.4	U	U	0.4	0.4	UG/L	
TERT-BUTYLBENZENE	1.4	U	U	1.4	1.4	UG/L	
TETRACHLOROETHENE	1.4	U	U	1.4	1.4	UG/L	
TOLUENE	1.1	U	U	1.1	1.1	UG/L	
TOLUENE-D8	102			0.1	0.1	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.6	U	U	0.6	0.6	UG/L	
TRANS-1,3-DICHLOROPROPENE	1	U	U	1	1	UG/L	
TRICHLOROETHENE	1	U	U	1	1	UG/L	
TRICHLOROFLUOROMETHANE	0.8	U	U	0.8	0.8	UG/L	
VINYL CHLORIDE	1.1	U	U	1.1	1.1	UG/L	

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIB004FD1	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.5	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.8	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.4	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	U	U	1	1	UG/L	
	1,1-DICHLOROETHANE	0.4	U	U	0.4	0.4	UG/L	
	1,1-DICHLOROETHENE	1.2	U	U	1.2	1.2	UG/L	
	1,1-DICHLOROPROPENE	1	U	U	1	1	UG/L	
	1,2,3-TRICHLOROBENZENE	0.3	U	U	0.3	0.3	UG/L	
	1,2,3-TRICHLOROPROPANE	3.2	U	U	3.2	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	U	U	0.4	0.4	UG/L	
	1,2,4-TRIMETHYLBENZENE	1.3	U	U	1.3	1.3	UG/L	
	2-DIBROMO-3-CHLOROPROPAN	2.6	U	U	2.6	2.6	UG/L	
	1,2-DIBROMOETHANE	0.6	U	U	0.6	0.6	UG/L	
	1,2-DICHLOROBENZENE	0.3	U	U	0.3	0.3	UG/L	
	1,2-DICHLOROETHANE	0.6	U	U	0.6	0.6	UG/L	
	1,2-DICHLOROETHANE-D4	100			0.5	0.5	ERCEN	
	1,2-DICHLOROPROPANE	0.4	U	U	0.4	0.4	UG/L	
	1,3-DICHLOROBENZENE	1.2	U	U	1.2	1.2	UG/L	
	1,3-DICHLOROPROPANE	0.4	U	U	0.4	0.4	UG/L	
	1,4-DICHLOROBENZENE	0.3	U	U	0.3	0.3	UG/L	
	1-CHLOROHEXANE	0.5	R	U	0.5	0.5	UG/L	SCVMIS
	2,2-DICHLOROPROPANE	3.5	U	U	3.5	3.5	UG/L	
	2-CHLOROTOLUENE	0.4	U	U	0.4	0.4	UG/L	
	4-BROMOFLUOROBENZENE	95			0.1	0.1	ERCEN	
	4-CHLOROTOLUENE	0.6	U	U	0.6	0.6	UG/L	
	BENZENE	0.4	U	U	0.4	0.4	UG/L	
	BROMOBENZENE	0.3	U	U	0.3	0.3	UG/L	
	BROMOCHLOROMETHANE	0.4	R	U	0.4	0.4	UG/L	SCVMIS
	BROMODICHLOROMETHANE	0.8	U	U	0.8	0.8	UG/L	
	BROMOFORM	1.2	U	U	1.2	1.2	UG/L	
	BROMOMETHANE	1.1	U	U	1.1	1.1	UG/L	
	CARBON TETRACHLORIDE	2.1	U	U	2.1	2.1	UG/L	
	CHLOROBENZENE	0.4	U	U	0.4	0.4	UG/L	

6521420

9804159 SW8260A

Page 6 of 9

CHLOROETHANE	1	U	U	1	1	UG/L	
CHLOROFORM	0.3	U	U	0.3	0.3	UG/L	
CHLOROMETHANE	1.3	U	U	1.3	1.3	UG/L	
CIS-1,2-DICHLOROETHENE	1.2	U	U	1.2	1.2	UG/L	
CIS-1,3-DICHLOROPROPENE	1	U	U	1	1	UG/L	
DIBROMOCHLOROMETHANE	0.5	U	U	0.5	0.5	UG/L	
DIBROMOFLUOROMETHANE	100			0.1	0.1	ERCEN	
DIBROMOMETHANE	2.4	U	U	2.4	2.4	UG/L	
DICHLORODIFLUOROMETHANE	1	U	U	1	1	UG/L	
ETHYLBENZENE	0.6	U	U	0.6	0.6	UG/L	
HEXACHLOROBUTADIENE	1.1	U	U	1.1	1.1	UG/L	
ISOPROPYLBENZENE	0.5	U	U	0.5	0.5	UG/L	
M+P-XYLENE	1.3	U	U	1.3	1.3	UG/L	
METHYLENE CHLORIDE	0.44	R	U	0.3	0.3	UG/L	CV%D
METHYLENE CHLORIDE	0.44	R	U	0.3	0.3	UG/L	IC%RSC
METHYLENE CHLORIDE	0.44	R	U	0.3	0.3	UG/L	BS%R
METHYLENE CHLORIDE	0.44	R	U	0.3	0.3	UG/L	BD%R
METHYLENE CHLORIDE	0.44	R	U	0.3	0.3	UG/L	SSCCV%
N-BUTYLBENZENE	1.1	U	U	1.1	1.1	UG/L	
N-PROPYLBENZENE	0.4	U	U	0.4	0.4	UG/L	
NAPHTHALENE	0.4	U	U	0.4	0.4	UG/L	
O-XYLENE	1.1	U	U	1.1	1.1	UG/L	
P-ISOPROPYLTOLUENE	1.2	U	U	1.2	1.2	UG/L	
SEC-BUTYLBENZENE	1.3	U	U	1.3	1.3	UG/L	
STYRENE	0.4	U	U	0.4	0.4	UG/L	
TERT-BUTYLBENZENE	1.4	U	U	1.4	1.4	UG/L	
TETRACHLOROETHENE	1.4	U	U	1.4	1.4	UG/L	
TOLUENE	1.1	U	U	1.1	1.1	UG/L	
TOLUENE-D8	100			0.1	0.1	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.6	U	U	0.6	0.6	UG/L	
TRANS-1,3-DICHLOROPROPENE	1	U	U	1	1	UG/L	
TRICHLOROETHENE	1	U	U	1	1	UG/L	
TRICHLOROFLUOROMETHANE	0.8	U	U	0.8	0.8	UG/L	
VINYL CHLORIDE	1.1	U	U	1.1	1.1	UG/L	

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIB005	1,1,1,2-TETRACHLOROETHANE	0.5	U	U	0.5	0.5	UG/L	
	1,1,1-TRICHLOROETHANE	0.8	U	U	0.8	0.8	UG/L	
	1,1,2,2-TETRACHLOROETHANE	0.4	U	U	0.4	0.4	UG/L	
	1,1,2-TRICHLOROETHANE	1	U	U	1	1	UG/L	
	1,1-DICHLOROETHANE	0.4	U	U	0.4	0.4	UG/L	
	1,1-DICHLOROETHENE	1.2	U	U	1.2	1.2	UG/L	
	1,1-DICHLOROPROPENE	1	U	U	1	1	UG/L	
	1,2,3-TRICHLOROBENZENE	0.3	U	U	0.3	0.3	UG/L	
	1,2,3-TRICHLOROPROPANE	3.2	U	U	3.2	3.2	UG/L	
	1,2,4-TRICHLOROBENZENE	0.4	U	U	0.4	0.4	UG/L	
	1,2,4-TRIMETHYLBENZENE	1.3	U	U	1.3	1.3	UG/L	
	2-DIBROMO-3-CHLOROPROPAN	2.6	U	U	2.6	2.6	UG/L	
	1,2-DIBROMOETHANE	0.6	U	U	0.6	0.6	UG/L	
	1,2-DICHLOROBENZENE	0.3	U	U	0.3	0.3	UG/L	
	1,2-DICHLOROETHANE	0.6	U	U	0.6	0.6	UG/L	
	1,2-DICHLOROETHANE-D4	1.1	U		0.5	0.5	ERCEN	
	1,2-DICHLOROPROPANE	0.4	U	U	0.4	0.4	UG/L	
	1,3-DICHLOROBENZENE	1.2	U	U	1.2	1.2	UG/L	
	1,3-DICHLOROPROPANE	0.4	U	U	0.4	0.4	UG/L	

1,4-DICHLOROBENZENE	0.3	U	U	0.3	0.3	UG/L	SCVMIS
I-CHLOROHEXANE	0.5	R	U	0.5	0.5	UG/L	
2,2-DICHLOROPROPANE	3.5	U	U	3.5	3.5	UG/L	
2-CHLOROTOLUENE	0.4	U	U	0.4	0.4	UG/L	
4-BROMOFLUOROBENZENE	93			0.1	0.1	ERCEN	
4-CHLOROTOLUENE	0.6	U	U	0.6	0.6	UG/L	
BENZENE	0.4	U	U	0.4	0.4	UG/L	
BROMOBENZENE	0.3	U	U	0.3	0.3	UG/L	
BROMOCHLOROMETHANE	0.4	R	U	0.4	0.4	UG/L	
BROMODICHLOROMETHANE	0.8	U	U	0.8	0.8	UG/L	
BROMOFORM	1.2	U	U	1.2	1.2	UG/L	
BROMOMETHANE	1.1	U	U	1.1	1.1	UG/L	
CARBON TETRACHLORIDE	2.1	U	U	2.1	2.1	UG/L	
CHLOROBENZENE	0.4	U	U	0.4	0.4	UG/L	
CHLOROETHANE	1	U	U	1	1	UG/L	
CHLOROFORM	0.3	U	U	0.3	0.3	UG/L	
CHLOROMETHANE	1.3	U	U	1.3	1.3	UG/L	
CIS-1,2-DICHLOROETHENE	1.2	U	U	1.2	1.2	UG/L	
CIS-1,3-DICHLOROPROPENE	1	U	U	1	1	UG/L	
DIBROMOCHLOROMETHANE	0.5	U	U	0.5	0.5	UG/L	
DIBROMOFLUOROMETHANE	102			0.1	0.1	ERCEN	
DIBROMOMETHANE	2.4	U	U	2.4	2.4	UG/L	
DICHLORODIFLUOROMETHANE	1	U	U	1	1	UG/L	
ETHYLBENZENE	0.6	U	U	0.6	0.6	UG/L	
HEXAChLOROBUTADIENE	1.1	U	U	1.1	1.1	UG/L	
ISOPROPYLBENZENE	0.5	U	U	0.5	0.5	UG/L	
M+P-XYLENE	1.3	U	U	1.3	1.3	UG/L	
METHYLENE CHLORIDE	0.36	R	U	0.3	0.3	UG/L	IC%RSI
METHYLENE CHLORIDE	0.36	R	U	0.3	0.3	UG/L	SSCCV%
METHYLENE CHLORIDE	0.36	R	U	0.3	0.3	UG/L	CV%D
METHYLENE CHLORIDE	0.36	R	U	0.3	0.3	UG/L	BD%R
METHYLENE CHLORIDE	0.36	R	U	0.3	0.3	UG/L	BS%R
N-BUTYLBENZENE	1.1	U	U	1.1	1.1	UG/L	
N-PROPYLBENZENE	0.4	U	U	0.4	0.4	UG/L	
NAPHTHALENE	0.4	U	U	0.4	0.4	UG/L	
O-XYLENE	1.1	U	U	1.1	1.1	UG/L	
P-ISOPROPYLtolUENE	1.2	U	U	1.2	1.2	UG/L	
SEC-BUTYLBENZENE	1.3	U	U	1.3	1.3	UG/L	
STYRENE	0.4	U	U	0.4	0.4	UG/L	
TERT-BUTYLBENZENE	1.4	U	U	1.4	1.4	UG/L	
TETRAChLOROETHENE	1.4	U	U	1.4	1.4	UG/L	
TOLUENE	1.1	U	U	1.1	1.1	UG/L	
TOLUENE-D8	105			0.1	0.1	ERCEN	
TRANS-1,2-DICHLOROETHENE	0.6	U	U	0.6	0.6	UG/L	
TRANS-1,3-DICHLOROPROPENE	1	U	U	1	1	UG/L	
TRICHLOROETHENE	1	U	U	1	1	UG/L	
TRICHLOROFUOROMETHANE	0.8	U	U	0.8	0.8	UG/L	
VINYL CHLORIDE	1.1	U	U	1.1	1.1	UG/L	

6521422

9804159 SW8260A

Page 8 of 9

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not requested
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFlag	Lab R flag removed; Re-analysis confirmed matnx effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria
SCVMISS	Missing target analyte

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL)

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matnx effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

Data Validation Report

SDG	980418!
Project	NAS FW JRB AOC 2
Reviewer	TAD
Date	7/30/98
Method	SW8260A
Matrix	Water

Case Narrative

- 1) Methylene Chloride was detected above the RL in the method blanks. The compound was also detected in samples -5, -6, -9, and 10
- 2) Dichlorodifluoromethane was recovered below the LT in the second-source calibration verification standards analyzed on 5/1/98 and on 5/2/98. Chloromethane and Bromomethane recoveries from the standard analyzed on 5/2/98 were also below the LT. None of the compounds were detected in the samples.
- 3) Methylene Chloride and 1-Chlorohexane exceeded the criteria for the LCS/LCSD analyzed on 4/29/98.
- 4) A number of compounds did not meet the criteria for MS/MSD
- 5) Samples -4, -5, -6, -9, and -10 were analyzed at dilutions due to the level of target analytes found
- 5) The laboratory indicated that average response factors were used to quantitate all analytes, although some analytes had RSDs greater than 15%. Method SW8260B requires use of regression equations in these cases.

Field Samples

Field Blanks No analyte was detected above the RL.

Field Duplicates

- 1) Methylene Chloride exceeded the RPD criteria. The concentrations found in both samples were less than 5X the RL. Results for this compound have already been flagged "R" for other reasons.
- 2) Sample -9 was originally analyzed undiluted. Chloroform and Tetrachloroethene were detected above the RL in this analysis - it was reanalyzed at a 1:20 dilution to bring TCE within calibration range. Chloroform and Tetrachloroethene were diluted out in this analysis. The field duplicate was analyzed at a 1:20 dilution only. Chloroform and Tetrachloroethene were not detected in this analysis

Form I Review A number of target analytes were detected > RL in some of the samples

Method Blanks Methylene Chloride was detected above the RL in the method blanks. Associated sample results less than 10 times the concentration found in the blank should have been flagged "U". However, since these results have already been flagged "R" for other deviations, no further flags have been applied.

Surrogates All criteria were met.

Tuning and Mass C All criteria were met.

Internal Standard All criteria were met

Initial Calibration 1. Methylene chloride exceeded the 30% RSD criteria for the ICAL on 3/31/98. The associated sample results have been flagged "R"

Continuing Calibra 1) The second-source calibration verification standard analyzed on 3/31/98 did not include the compounds Bromochloromethane and 1-chlorohexane. The recovery of Methylene Chloride from this standard was below 75% of the expected concentration. The associated results have been flagged "R"

	2) The recoveries of Methylene Chloride from the continuing calibration verification standard analyzed on 4/28/98 at 12 14PM and on 4/29/98 at 7 53 AM were not within 75-125% of the expected concentration. The associated results have been flagged "R"
Matrix Spike	<p>1) The recoveries of Methylene Chloride, TCE, and 1,2,4-Trimethylbenzene from the MS and MSD were below the LT. Positive results in the native sample have been flagged "J", and the non-detects, "UJ", unless a more severe flag has been applied for other deviations.</p> <p>2) The recoveries of Styrene from the MS, and of cis-1,2-Dichloroethene from the MSD were below the LT. The associated positive results have been flagged "J", and the non-detects "UJ".</p> <p>3) The RPDs for Styrene and 1,2,4-Trimethylbenzene in the MS/MSD exceeded the UT. The associated positive results have already been flagged "J" for unacceptable recoveries.</p>
Laboratory Control	<p>1) The recoveries of Methylene Chloride from the LCS and LCSD analyzed on 4/29/98 were below the LT. All associated positive results should have been flagged "J", and the non-detects, "R". However, since the results have already been flagged "R" for other deviations, no further flags have been applied.</p> <p>2) The recoveries of 1-Chlorohexane and 1,3,5-Trimethylbenzene from the LCS analyzed on 4/29/98 were above the UT. Neither one of these compounds was detected in the samples, and no flags have been applied.</p>
Laboratory Duplicate	None in this SDG
Holding Time	Holding times were met.
COC	No discrepancies were noted.
Comments	<p>1) Methylene Chloride exceeded the RPD criteria for the field duplicates. The concentrations found in both samples were less than 5X the RL. Results for this compound have already been flagged "R" for other deviations</p> <p>2) Sample -9 was originally analyzed undiluted. Chloroform and Tetrachloroethene were detected above the RL in this analysis. It was reanalyzed at a 1:20 dilution to bring TCE within calibration range. Chloroform and Tetrachloroethene were diluted out in this analysis. The field duplicate was analyzed at a 1:20 dilution only. Chloroform and Tetrachloroethene were not detected in this analysis. Positive results for Chloroform and Tetrachloroethene in the field duplicate pair have been flagged "J", and non-detects, "UJ".</p> <p>3) Methylene Chloride was detected above the RL in the method blanks. Associated sample results less than 10 times the concentration found in the blank should have been flagged "U". However, since these results have already been flagged "R" for other deviations, no further flags have been applied</p> <p>4) Methylene chloride exceeded the 30% RSD criteria for the ICAL on 3/31/98. The associated sample results have been flagged "R".</p> <p>5) The second-source calibration verification standard analyzed on 3/31/98 did not include the compounds Bromochloromethane and 1-chlorohexane. The recovery of Methylene Chloride from this standard was below 75% of the expected concentration. The associated results have been flagged "R".</p> <p>6) The recoveries of Methylene Chloride from the continuing calibration verification standard analyzed on 4/28/98 at 12 14PM and on 4/29/98 at 7:53 AM were below 75% of the expected concentration. The associated results have been flagged "R".</p> <p>7) The recoveries of Methylene Chloride, TCE (TCE with zero recoveries), and 1,2,4-Trimethylbenzene from the MS and MSD were below the LT. All associated positive results have been flagged "J", and the non-detects, "UJ", unless a more severe flag has been applied for other deviations.</p> <p>8) The recoveries of Styrene from the MS, and of cis-1,2-Dichloroethene from the MSD were below the LT. The associated positive results have been flagged "J", and the non-detects "UJ".</p> <p>9) The RPDs for Styrene and 1,2,4-Trimethylbenzene in the MS/MSD exceeded the UT. The associated positive results have already been flagged "J" for unacceptable recoveries.</p> <p>10) The recovery of Methylene Chloride from the LCS analyzed on 4/29/98 was below the LT. All associated positive results should have been flagged "J", and the non-detects, "R". However, since the results have already been flagged "R" for other deviations, no further flags have been applied.</p> <p>11) The recoveries of 1-Chlorohexane and 1,3,5-Trimethylbenzene from the LCS analyzed on 4/29/98 were above the UT. Neither one of these compounds was detected in the samples, and no flags have been applied.</p>
Package Completeness	<p>1) The documentation of out-of-control conditions in the case narrative is incomplete. For example, there is no mention of second-source and continuing calibration verification deviations, the unacceptable recovery of 1,3,5-Trimethylbenzene from the LCS on 4/29/98, or the unacceptable recovery of cis-1,2-Dichloroethene from the MSD. As a matter of fact, the case narrative erroneously states that all continuing calibration criteria were met. The case narrative addresses the laboratory's failure to comply with the method requirement to use regression equations for quantitation of compounds exceeding 15%</p>

RSD, but does not indicate that one compounds did not meet the 30% RSD required by the QAPP. The QAPP actually allows the use of either the average RRFs or regression equations for quantitation as long as the RSD is not >30%.

- 2) The results of second-source calibration verifications should be included in the summaries, and should be presented in terms of percent of the expected concentrations.
- 3) The second-source calibration verification standard should include all target analytes
- 4) The laboratory did not follow QAPP-specified flagging requirements. For example, no flag attributable to unacceptable MS/MSD has been applied to 1,2,4-Trimethylbenzene. The reason for the "R" flags for 1,3,5-Trimethylbenzene in samples analyzed on 4/29/98 is not clear to this reviewer. If the results have been flagged due to the 4/29/98 LCS recovery exceeding the UT, they should not have been, since the analyte was not detected in these samples.

6521427

SDG 9804186

Project NAS FW JRB AOC 2

Reviewer TAD

Date 7/29/98

Method SW6010A

Matrix Water

Case Narrative

- 1) Iron was detected above the RL in the method blank. All samples with Fe concentrations less than 10 times that found in the blank were re-digested. These samples were -3, -6, -7, -9, and -10
- 2) Iron did not meet the MS/MSD criteria. This was likely due to the native concentration being more than 4 times the spike concentration.
- 3) The laboratory's current MDL (104 ug/L) for Calcium is not less than the required PQL of 100 ug/L.

Field Samples

Field Blanks Calcium was detected above the RL. The Ca concentrations in the field samples were much higher than 5 times that found in the equipment blank.

Field Duplicates Iron, Magnesium, and Sodium exceeded the RPD UT in both sets of field duplicates. The associated positive results have been flagged "J".

Form I Review All analytes except Lead and Potassium were detected above the RL.

Method Blanks Iron was detected above the RL in the method blank. All associated positive sample results less than 5 times that found in the blank have been flagged "U".

Surrogates NA

Tuning and Mass C NA

Internal Standard NA

Initial Calibration All criteria were met, however the results of the multi-point ICAL were not summarized.

Continuing Calibra All criteria were met, however the results of the highest calibration standard readback were not included in the calibration summaries.

Matrix Spike

- 1) The RPD for Iron exceeded the UT. This was likely due to the native concentrations being much higher than 4 times the spike concentration. The associated positive results have been flagged "J".
- 2) The RPDs reported for the MS/MSD are incorrect in that they are based on the spiked sample concentrations instead of the percent recoveries

Laboratory Control All criteria were met.

Laboratory Duplic Not applicable

Holding Time Holding times were met.

COC No discrepancies were noted.

Comments

- 1) Calcium was detected above the RL in the field blank. The Ca concentrations in the field samples were much higher than 5 times that found in the equipment blank.
- 2) Aluminum and Magnesium were found in the calibration blanks below the RL. All positive sample results less than 5 times the highest concentration found in any blank have been flagged "U".

123456789
6521428

- 3) Iron was detected above the RL in the method blank. All associated positive sample results less than 5 times that found in the blank have been flagged "U".
- 4) Iron, Magnesium, and Sodium exceeded the RPD UT in both sets of field duplicates. The associated positive sample results have been flagged "J".
- 5) The RPD for Iron in the MS/MSD exceeded the UT. This was likely due to the native concentrations being much higher than 4 times the spike concentration. The associated positive results have been flagged "J".
- 6) The RPDs reported for the MS/MSD are incorrect in that they are based on the spiked sample concentrations instead of the percent recoveries.
- 7) The multi-point ICAL results should be summarized to show concentrations, response factors, and correlation coefficients to facilitate data review.
- 8) The results of highest standard readbacks should be included in the calibration summaries to facilitate data review.
- 9) The laboratory's current MDL for Calcium is 0.104 mg/L. The required PQL is 0.1 mg/L

Package Completion

- 1) The RPDs reported for the MS/MSD are incorrect in that they are based on the spiked sample concentrations instead of the percent recoveries.
- 2) The multi-point ICAL results should be summarized to show concentrations, response factors, and correlation coefficients to facilitate data review.
- 3) The results of highest standard readbacks should be included in the calibration summaries to facilitate data review.

6521429

SDG 9804186

Project NAS FW JRB AOC 2

Reviewer TAD

Date 7/29/98

Method SW9060

Matrix Water

Case Narrative No items of interest.

Field Samples

Field Blanks Total Organic Carbon was not detected in the equipment blank

Field Duplicates The analyte concentrations were not high enough to evaluate RPD

Form I Review Low-levels (1 to 11 mg/L) of the analyte were reported in all field samples

Method Blanks No analyte was detected above the RL.

Surrogates Not applicable

Tuning and Mass C Not applicable.

Internal Standard Not applicable.

Initial Calibration All criteria were met.

Continuing Calibra All criteria were met

Matrix Spike All criteria were met.

Laboratory Control None in this SDG

Laboratory Duplic Not applicable.

Holding Time Holding times were met.

COC No discrepancies were noted.

Comments All data were found to be acceptable

Package Completeness The data package was acceptable

SDG	9804186
Project	NAS FW JR8 AOC 2
Reviewer	TAD
Date	7/29/98
Method	SW9056
Matrix	Water

Case Narrative No items of interest.

Field Samples

Field Blanks No analytes were detected above the RL.

Field Duplicates The concentrations of Fluoride in samples -5 and -6 were not high enough to evaluate RPD. All other analytes met the criteria.

Form I Review Analytes were detected above the RL with the exception of Orthophosphate and Nitrite

Method Blanks No analytes were detected above the RL.

Surrogates Not applicable

Tuning and Mass C Not applicable.

Internal Standard Not applicable.

Initial Calibration All criteria were met.

Continuing Calibra All criteria were met.

Matrix Spike The percent recovery control limits used by the laboratory were not those specified by the QAPP. All QAPP-specified criteria were, however, met.

Laboratory Control The percent recovery control limits used by the laboratory were not those specified by the QAPP. All QAPP-specified criteria were, however, met.

Laboratory Duplic Not applicable.

Holding Time Holding times were met.

COC No discrepancies were noted.

Comments

- 1) The percent recovery control limits used by the laboratory for the LCS and the MS/MSD were not those specified by the QAPP. All QAPP-specified criteria were, however, met.
- 2) All data were found to be acceptable

Package Completen The percent recovery control limits used by the laboratory were not those specified by the QAPP. All QAPP-specified criteria were, however, met.

6521431

SDG	9804186
Project	NAS FW JRB AOC 2
Reviewer	TAD
Date	7/28/98
Method	E310 1
Matrix	Water

Case Narrative No items of interest.

Field Samples

Field Blanks Alkalinity was detected above the RL. All field sample results were >5 times the field blank concentration.

Field Duplicates All criteria were met.

Form I Review The analyte was reported above the RL in all samples.

Method Blanks The analyte was not detected above the RL.

Surrogates Not applicable

Tuning and Mass C Not applicable

Internal Standard Not applicable.

Initial Calibration Not applicable.

Continuing Calibra Not applicable

-Matrix Spike None in this SDG

Laboratory Contro All criteria were met.

Laboratory Duplic All criteria were met.

Holding Time Holding times were met.

COC No discrepancies were noted

Comments All data were found to be acceptable

Package Completen The data package was acceptable.

SDG	9804186
Project	NAS FW JRB AOC 2
Reviewer	TAD
Date	7/28/98
Method	SW8260A
Matrix	Water

Case Narrative

- 1) The Methylene Chloride recovery from the second-source calibration verification standard analyzed on 3/31/98 was not within +/-25% of the expected concentration. The associated results have been flagged "R".
- 2) The recoveries of Dichlorodifluoromethane, Chloromethane, and Vinyl Chloride from the second-source calibration verification standard analyzed on 4/30/98 were not within +/-25% of the expected concentrations. The associated results have been flagged "R"
- 3) Methylene Chloride was detected above the RL in the method blanks. Sample results less than 10 times the concentration found in the associated blank have been flagged "U".
- 4) A number of compounds exceeded the criteria for the LCS/LCSD percent recovery. Positive results in the associated samples have been flagged "J" for compounds which exceeded the UT or LT Non-detects in the associated samples have been flagged "UJ" for compounds which exceeded the LT
- 5) A number of compounds did not meet the criteria for MS/MSD. Positive results associated with percent recoveries above the UT or below the LT and RPDs above the UT have been flagged "J". Non-detects associated with percent recoveries below the LT have been flagged "UJ"
- 6) Samples -3, -5, -6, and -9 were analyzed at dilutions due to the level of target analytes found.
- 7) The laboratory indicated that average response factors were used to quantitate all analytes, although some analytes had RSDs greater than 15%. Method SW8260B requires use of regression equations in these cases.

Field Samples

Field Blanks Methylene Chloride was detected above the RL in both the trip blank and the equipment blank. This compound was also detected above the RL in the method blanks. Associated sample results less than 10 times the highest concentration found in any blank have been flagged "U".

Field Duplicates All criteria were met

Form I Review A number of target analytes were detected > RL in some of the samples.

Method Blanks Methylene Chloride was detected above the RL in the method blanks. This compound was also detected above the RL in the trip blank and the equipment blank. Associated sample results less than 10 times the highest concentration found in any blank should have been flagged "U". However, since these results have already been flagged "R" for other deviations, no further flags have been applied

Surrogates All criteria were met.

Tuning and Mass C All criteria were met.

Internal Standard All criteria were met.

Initial Calibration

1. Methylene chloride exceeded the 30% RSD criteria for the ICAL on 3/31/98. The associated sample results have been flagged "R".
- 2) Methylene Chloride, 1,2-Dibromoethane, and Naphthalene exceeded the 30% RSD criteria for the ICAL performed on 4/30/98. The average RRF for the SPCC compound, 1,1,2,2-Tetrachloroethane for the same ICAL was less than 0.30. This latter out-of-control condition was not mentioned in the case narrative. All associated results have been flagged "R".

Continuing Calibration 1) The second-source calibration verification standard analyzed on 3/31/98 did not include the

compounds Bromochloromethane and 1-chlorohexane. The recovery of Methylene Chloride from this standard was below +/-25% of the expected concentration. The associated results have been flagged "R".
 2) The second-source calibration verification standard analyzed on 4/30/98 did not include 1-Chlorohexane. The recoveries of Dichlorodifluoromethane, Chloromethane, Vinyl Chloride, and Bromochloromethane were not within +/-25% of the expected concentrations. The associated results have been flagged "R".
 3) The recovery of Methylene Chloride from the continuing calibration verification standard analyzed on 4/29/98 at 7:53 AM was not within +/-25% of the expected concentration. The associated results have been flagged "R".

Matrix Spike	1) The recoveries of Vinyl Chloride, Methylene Chloride, trans-1,2-Dichloroethene, and cis-1,2-Dichloroethene from the MS and MSD were below the LT. All associated positive results have been flagged "J", and the non-detects, "UJ", unless a higher-ranking flag has been applied for other deviations 2) The recoveries of Trichloroethene from the MS and MSD were above the UT. The associated positive results have been flagged "J". 3) The RPDs for Chloromethane and Trichloroethene in the MS/MSD exceeded the UT. The associated positive results have been flagged "J"
Laboratory Control	1) The recoveries of Methylene Chloride from the LCS and LCSD analyzed on 4/29/98 were below the LT. All associated positive results should have been flagged "J", and the non-detects, "R". However, since the results have already been flagged "R" for other deviations, no further flags have been applied. 2) The recoveries of 1-Chlorohexane and 1,3,5-Trimethylbenzene from the LCS analyzed on 4/29/98 were above the UT. All associated positive results have been flagged "J".
Laboratory Duplicate	None in this SDG.
Holding Time	Holding times were met.
COC	No discrepancies were noted.
Comments	1) Methylene Chloride was detected above the RL in the method blanks. This compound was also detected above the RL in the trip blank and the equipment blank. Associated sample results less than 10 times the highest concentration found in any blank should have been flagged "U". However, these results have already been flagged "R" for other deviations, therefore no further flags have been applied 2) Methylene chloride exceeded the 30% RSD criteria for the ICAL on 3/31/98. The associated sample results have been flagged "R". 3) Methylene Chloride, 1,2-Dibromoethane, and Naphthalene exceeded the 30% RSD criteria for the ICAL performed on 4/30/98. The average RRF for the SPCC compound, 1,1,2,2-Tetrachloroethane for the same ICAL was less than 0.30. This latter out-of-control condition was not mentioned in the case narrative. All associated results have been flagged "R". 4) The second-source calibration verification standard analyzed on 3/31/98 did not include the compounds Bromochloromethane and 1-chlorohexane. The recovery of Methylene Chloride from this standard was below +/-25% of the expected concentration. The associated results have been flagged "R". 5) The second-source calibration verification standard analyzed on 4/30/98 did not include 1-Chlorohexane. The recoveries of Dichlorodifluoromethane, Chloromethane, Vinyl Chloride, and Bromochloromethane were not within +/-25% of the expected concentrations. The associated results have been flagged "R". 6) The recovery of Methylene Chloride from the continuing calibration verification standard analyzed on 4/29/98 at 7:53 AM was not within +/-25% of the expected concentration. The associated results have been flagged "R". 7) The recoveries of Vinyl Chloride, Methylene Chloride, trans-1,2-Dichloroethene, and cis-1,2-Dichloroethene from the MS and MSD were below the LT. All associated positive results have been flagged "J", and the non-detects, "UJ", unless a higher ranking flag has been applied for other deviations. 8) The recoveries of Trichloroethene from the MS and MSD were above the UT. The associated positive results have been flagged "J". 9) The RPDs for Chloromethane and Trichloroethene in the MS/MSD exceeded the UT. The associated positive results have been flagged "J". 10) The recoveries of Methylene Chloride from the LCS and LCSD analyzed on 4/29/98 were below the LT. All associated positive results have been flagged "J", and the non-detects, "R". 11) The recoveries of 1-Chlorohexane and 1,3,5-Trimethylbenzene from the LCS analyzed on 4/29/98 were above the UT. All associated positive results have been flagged "J". 12) The laboratory did not follow QAPP-specified flagging conventions. For example, the reason for the "R" flags for 1,3,5-Trimethylbenzene in samples -1 through -5 is not clear to this reviewer. If the results have been flagged due to the 4/29/98 LCS recovery exceeding the UT, they should not have been, since

6521434

the analyte was not detected in these samples.

Package Completeness

- 1) The documentation of out-of-control conditions in the case narrative is incomplete. For example, there is no mention of the failure to meet the minimum average RRF for 1,1,2,2-Tetrachloroethane, an SPCC compound, in the ICAL of 4/30/98, or the unacceptable recovery of 1,3,5-Trimethylbenzene on 4/29/98. The case narrative addresses the laboratory's failure to comply with the method requirement to use regression equations for quantitation of compounds exceeding 15% RSD, but does not indicate that some compounds did not meet the 30% RSD required by the QAPP. The QAPP actually allows the use of either the average RRFs or regression equations for quantitation as long as the RSD is not >30%.
- 2) The results of second-source calibration verifications should be included in the summaries, and should be presented in terms of percent of the expected concentrations
- 3) The second-source calibration verification standard should include all target analytes
- 4) The laboratory did not follow QAPP-specified flagging conventions. For example, the reason for the "R" flags for 1,3,5-Trimethylbenzene in samples -1 through -5 is not clear to this reviewer. If the results have been flagged due to the 4/29/98 LCS recovery exceeding the UT, they should not have been, since the analyte was not detected in these samples.

6521435

SDG 9804214

Project NAS FW JRB AOC 2

Reviewer TAD

Date 8/5/98

Method SW6010A

Matrix Water

Case Narrative

- 1) Aluminum and Iron did not meet the MS/MSD accuracy criteria. The laboratory indicated that the concentration of Iron in the native sample was more than 4 times the spike concentration.
- 2) Sample 9804214-7 had to be analyzed diluted to bring some target analytes within the calibration range.
- 3) The laboratory's current MDL for Calcium is 0.104 mg/L. The required PQL is 0.1 mg/L.

Field Samples

Field Blanks No analyte was detected above the RL.

Field Duplicates None in this SDG

Form I Review All analytes except Lead were detected above the RL.

Method Blanks No analytes were detected above the RL.

Surrogates NA

Tuning and Mass C NA

Internal Standard NA

Initial Calibration All criteria were met, however the results of the multi-point ICAL were not summarized.

Continuing Calibration All criteria were met, however the results of the highest calibration standard readback were not included in the calibration summaries.

Matrix Spike

- 1) The percent recoveries of Aluminum from the MS and MSD exceeded the UT. Associated positive results have been flagged "J".
- 2) The percent recoveries of Iron from the MS and MSD were below the LT. This was likely due to the native concentration being much higher than 4 times the spike concentration. The associated positive results have been flagged "J".

Laboratory Control All criteria were met.

Laboratory Duplicate Not applicable.

Holding Time Holding times were met.

COC No discrepancies were noted.

Comments

- 1) 1) The percent recoveries of Aluminum from the MS and MSD exceeded the UT. Associated positive results have been flagged "J". The percent recoveries of Iron from the MS and MSD were below the LT. This was likely due to the native concentration being much higher than 4 times the spike concentration. The associated positive results have been flagged "J".
- 2) The multi-point ICAL results should be summarized to show concentrations, response factors, and

- correlation coefficients to facilitate data review
3) The results of highest standard readbacks should be included in the calibration summaries to facilitate data review.
4) The laboratory's current MDL for Calcium is 0.104 mg/L. The required PQL is 0.1 mg/L

Package Completeness 1) The RPDs reported for the MS/MSD are incorrect in that they are based on the spiked sample concentrations instead of the percent recoveries.

- 2) The multi-point ICAL results should be summarized to show concentrations, response factors, and correlation coefficients to facilitate data review
3) The results of highest standard readbacks should be included in the calibration summaries to facilitate data review

6521437

SDG	9804214
Project	NAS FW JRB AOC 2
Reviewer	TAD
Date	8/5/98
Method	E310 I
Matrix	Water

Case Narrative No items of interest.

Field Samples

Field Blanks Alkalinity was detected above the RL in the equipment blank. All field sample results were >5 times the field blank concentration

Field Duplicates None in this SDG.

Form I Review The analyte was reported above the RL in all samples.

Method Blanks The analyte was not detected above the RL

Surrogates Not applicable.

Tuning and Mass C Not applicable

Internal Standard Not applicable.

Initial Calibration Not applicable.

Continuing Calibra Not applicable

Matrix Spike - None in this SDG.

Laboratory Contro All criteria were met.

Laboratory Duplic All criteria were met.

Holding Time Holding times were met.

COC No discrepancies were noted.

Comments All data were found to be acceptable.

Package Completen The data package was acceptable.

6521438

SDG 9804214

Project NAS FW JRB AOC 2

Reviewer TAD

Date 8/5/98

Method SW9056

Matrix Water

Case Narrative No items of interest.

Field Samples

Field Blanks No analytes were detected above the RL in the equipment blank.

Field Duplicates None in this SDG.

Form I Review Analytes were detected above the RL with the exception Nitrite.

Method Blanks No analytes were detected above the RL.

Surrogates Not applicable

Tuning and Mass C Not applicable

Internal Standard Not applicable

Initial Calibration All criteria were met

Continuing Calibra All criteria were met

Matrix Spike The percent recovery control limits used by the laboratory were not those specified by the QAPP. All QAPP-specified criteria were, however, met.

Laboratory Contro The percent recovery control limits used by the laboratory were not those specified by the QAPP. All QAPP-specified criteria were, however, met.

Laboratory Duplic Not applicable.

Holding Time Holding times were met.

COC No discrepancies were noted

Comments 1) The percent recovery control limits used by the laboratory for the LCS and the MS/MSD were not those specified by the QAPP. All QAPP-specified criteria were, however, met
2) All data were found to be acceptable.

Package Completen The percent recovery control limits used by the laboratory were not those specified by the QAPP. All QAPP-specified criteria were, however, met.

6521439

SDG 9804214

Project NAS FW JRB AOC 2

Reviewer TAD

Date 8/5/98

Method SW9060

Matrix Water

Case Narrative No items of interest.

Field Samples

Field Blanks Total Organic Carbon was not detected in the equipment blank

Field Duplicates None in this SDG

Form I Review Low-levels (1 to 5 mg/L) of the analyte were reported in all field samples

Method Blanks No analyte was detected above the RL.

Surrogates Not applicable

Tuning and Mass C Not applicable

Internal Standard Not applicable

Initial Calibration All criteria were met.

Continuing Calibra All criteria were met.

Matrix Spike All criteria were met.

Laboratory Contro None in this SDG.

Laboratory Duplic Not applicable.

Holding Time Holding times were met

COC No discrepancies were noted

Comments All data were found to be acceptable

Package Completen The data package was acceptable

SDG	9804214
Project	NAS FW JRB AOC 2
Reviewer	TAD
Date	7/30/98
Method	SW8260A
Matrix	Water

Case Narrative

- 1) Methylene Chloride was detected above the RL in the method blanks. The compound was also detected in samples -2, -6, and -8.
- 2) Some compounds did not meet the criteria for the LCSSs analyzed on 5/1/98 and 5/2/98
- 3) A number of compounds did not meet the criteria for MS/MSD
- 4) Dichlorodifluoromethane did not meet the criteria for the second-source calibration verification standard analyzed on 5/1/98.
- 5) Dichlorodifluoromethane, Chloromethane, and Bromomethane did not meet the criteria for the second-source calibration verification standard analyzed on 5/2/98
- 5) The laboratory indicated that average response factors were used to quantitate all analytes, although some analytes had RSDs greater than 15% Method SW8260B requires use of regression equations in these cases
- 6) Samples -6 and -8 were analyzed diluted due to the concentrations of target analytes present

Field Samples

Field Blanks

- 1) Methylene Chloride was detected above the RL in the trip blank. This compound was also detected above the RL in the associated method blank. Associated sample results less than 10 times the highest blank concentration have been flagged "U", unless a more severe flag had to be applied for other deviations.
- 2) No analytes were detected above the RL in the other field blanks.

Field Duplicates None in this SDG.

Form I Review A number of target analytes were detected > RL in some of the samples.

Method Blanks Methylene Chloride was detected above the RL in the method blanks. This compound was also detected in the trip blank. Associated sample results less than 10 times the highest concentration found in any blank have been flagged "U", unless a more severe flag had to be applied for other deviations

Surrogates All criteria were met.

Tuning and Mass C All criteria were met.

Internal Standard All criteria were met.

Initial Calibration 1) Methylene chloride exceeded the 30% RSD criteria for the ICAL on 5/2/98. The associated sample results have been flagged "R".

Continuing Calibration

- 1) The second-source calibration verification standards analyzed on 5/1/98 and 5/2/98 did not include the compounds Bromochloromethane and 1-chlorohexane. The associated sample results have been flagged "R".
- 2) The recovery of Dichlorodifluoromethane from the second-source calibration verification standard analyzed on 5/1/98 was not within 75-125% of the expected concentration. The associated sample results have been flagged "R".
- 3) The recoveries of Dichlorodifluoromethane, Chloromethane, and Bromomethane from the second-source calibration verification standard analyzed on 5/2/98 were not within 75-125% of the expected concentrations. The associated sample results have been flagged "R".
- 4) Continuing calibration standards were not analyzed since the samples were analyzed immediately

following, and within 12 hours of the ICAL and second-source calibration verification standards

Matrix Spike	The recoveries of Bromobenzene from the MS and of 2,2-Dichloropropane, 1,1-Dichloropropene, Trichloroethene, Toluene, n-Propylbenzene, tert-Butylbenzene, 1,2,4-Trimethylbenzene, sec-Butylbenzene, and p-Isopyltoluene from the MSD were below the LT. Positive results in the native sample have been flagged "J", and the non-detects, "UJ", unless a more severe flag had to be applied for other deviations
	3) The RPDs for Styrene and 1,2,4-Trimethylbenzene in the MS/MSD exceeded the UT. The associated positive results have already been flagged "J" for unacceptable recoveries.
Laboratory Control	<p>1) Methylene Chloride recoveries from the LCS and LCSD analyzed on 5/1/98 were above the UT. This was not mentioned in the case narrative. Associated positive results for these compounds have been flagged "J".</p> <p>2) The RPD for Bromobenzene in the LCS/LCSD analyzed on 5/1/98 exceeded the criteria. This compound was not detected in the associated samples, and no flags have been applied.</p> <p>3) The recovery of Methylene Chloride from the LCSD analyzed on 5/2/98 was below the LT. Associated sample results have already been flagged "R" due to calibration deviation, therefore no further flags have been applied.</p> <p>4) The recovery of 1,3,5-Trimethylbenzene from the LCSD analyzed on 5/2/98 was above the UT. This compound was not detected in the associated samples, and no flags have been applied.</p> <p>5) The RPDs for Methylene Chloride, Isopropylbenzene, Bromobenzene, and n-Butylbenzene in the LCS/LCSD analyzed on 5/2/98 exceeded the UT. Associated positive results have been flagged "J", unless a more severe flag had to be applied for other deviations</p>
Laboratory Duplicate	None in this SDG.
Holding Time	Holding times were met.
COC	No discrepancies were noted
Comments	<p>1) Methylene Chloride was detected above the RL in the trip blank. This compound was also detected above the RL in the method blanks. Associated sample results less than 10 times the highest blank concentration have been flagged "U", unless a more severe flag had to be applied for other deviations.</p> <p>2) Methylene chloride exceeded the 30% RSD criteria for the ICAL on 5/2/98. The associated sample results have been flagged "R".</p> <p>3) The second-source calibration verification standards analyzed on 5/1/98 and 5/2/98 did not include the compounds Bromochloromethane and 1-chlorohexane. The associated sample results have been flagged "R".</p> <p>4) The recovery of Dichlorodifluoromethane from the second-source calibration verification standard analyzed on 5/1/98 was not within 75-125% of the expected concentration. The associated sample results have been flagged "R".</p> <p>5) The recoveries of Dichlorodifluoromethane, Chloromethane, and Bromomethane from the second-source calibration verification standard analyzed on 5/2/98 were not within 75-125% of the expected concentrations. The associated sample results have been flagged "R".</p> <p>6) The recoveries of Bromobenzene from the MS and of 2,2-Dichloropropane, 1,1-Dichloropropene, Trichloroethene, Toluene, n-Propylbenzene, tert-Butylbenzene, 1,2,4-Trimethylbenzene, sec-Butylbenzene, and p-Isopyltoluene from the MSD were below the LT. Positive results in the native sample have been flagged "J", and the non-detects, "UJ", unless a more severe flag had to be applied for other deviations.</p> <p>7) The RPDs for Styrene and 1,2,4-Trimethylbenzene in the MS/MSD exceeded the UT. The associated positive results have already been flagged "J" for unacceptable recoveries</p> <p>8) Methylene Chloride recoveries from the LCS and LCSD analyzed on 5/1/98 were above the UT. This was not mentioned in the case narrative. Associated positive results for these compounds have been flagged "J".</p> <p>9) The RPD for Bromobenzene in the LCS/LCSD analyzed on 5/1/98 exceeded the criteria. This compound was not detected in the associated samples, and no flags have been applied.</p> <p>3) The recovery of Methylene Chloride from the LCSD analyzed on 5/2/98 was below the LT. Associated sample results have already been flagged "R" due to calibration deviation, therefore no further flags have been applied.</p> <p>4) The recovery of 1,3,5-Trimethylbenzene from the LCSD analyzed on 5/2/98 was above the UT. This compound was not detected in the associated samples, and no flags have been applied.</p> <p>5) The RPDs for Methylene Chloride, Isopropylbenzene, Bromobenzene, and n-Butylbenzene in the LCS/LCSD analyzed on 5/2/98 exceeded the UT. Associated positive results have been flagged "J", unless a more severe flag had to be applied for other deviations</p>

16521442

- Package Completeness
- 1) The documentation of out-of-control conditions in the case narrative is incomplete. For example, there is no mention of calibration verification deviations, the unacceptable recoveries of Methylene Chloride from the LCS/LCSD on 5/1/98, or its unacceptable ICAL RSD on 5/2/98. The case narrative erroneously states that all continuing calibration criteria were met. The case narrative addresses the laboratory's failure to comply with the method requirement to use regression equations for quantitation of compounds exceeding 15% RSD. The QAPP actually allows the use of either the average RRFs or regression equations for quantitation as long as the RSD is not >30%.
 - 2) The results of second-source calibration verifications should be included in the summaries, and should be presented in terms of percent of the expected concentrations.
 - 3) The second-source calibration verification standard should include all target analytes.

6521443

SDG 9804220
Project NAS FW JRB AOC 2
Reviewer TAD
Date 8/5/98
Method SW8260A
Matrix Water

Case Narrative

- 1) Methylene Chloride was detected above the RL in the method blanks. The compound was also detected in the samples.
- 2) Some compounds did not meet the criteria for the LCSs analyzed on 5/2/98 and 5/3/98
- 3) Some samples were analyzed diluted due to the levels of analytes present
- 5) Dichlorodifluoromethane, Chloromethane, and Bromomethane did not meet the criteria for the second-source calibration verification standard analyzed on 5/2/98.
- 5) The laboratory indicated that average response factors were used to quantitate all analytes, although some analytes had RSDs greater than 15%. Method SW8260B requires use of regression equations in these cases.
- 6) Samples -6 and -8 were analyzed diluted due to the concentrations of target analytes present.

Field Samples

Field Blanks

- 1) Methylene Chloride was detected above the RL in the trip blank. This compound was also detected above the RL in the method blanks. Associated sample results less than 10 times the highest blank concentration have been flagged "U", unless a more severe flag had to be applied for other deviations
- 2) No analytes were detected above the RL in the equipment blank.

Field Duplicates All criteria were met

Form I Review A number of target analytes were detected above the RL in some of the samples

Method Blanks Methylene Chloride was detected above the RL in the method blanks. This compound was also detected in the trip blank. Associated sample results less than 10 times the highest concentration found in any blank have been flagged "U", unless a more severe flag had to be applied for other deviations.

Surrogates All criteria were met

Tuning and Mass C All criteria were met.

Internal Standard All criteria were met

Initial Calibration 1. Methylene chloride exceeded the 30% RSD criteria for the ICAL on 5/2/98. The associated sample results have been flagged "R".

Continuing Calibration

- 1) The second-source calibration verification standards analyzed on 5/2/98 did not include the compounds Bromochloromethane and 1-chlorohexane. The associated sample results have been flagged "R".
- 2) The recoveries of Dichlorodifluoromethane, Chloromethane, and Bromomethane from the second-source calibration verification standard analyzed on 5/2/98 were not within 75-125% of the expected concentrations. The associated sample results have been flagged "R".
- 3) The recovery of Dichlorodifluoromethane from the continuing calibration standard analyzed on 5/2/98 was not within 75-125% of the expected concentration. The associated sample results have been flagged "R".

Matrix Spike None in this SDG.

Laboratory Control	<ul style="list-style-type: none"> 1) The recovery of Methylene Chloride from the LCSD analyzed on 5/2/98 was below the LT. Associated sample results have already been flagged "R" due to calibration deviation, therefore no further flags have been applied. 2) The recovery of 1,3,5-Trimethylbenzene from the LCSD analyzed on 5/2/98 was above the UT. This compound was not detected in the associated samples, and no flags have been applied. 3) The RPDs for Methylene Chloride, Isopropylbenzene, Bromobenzene, and n-Butylbenzene in the LCS/LCSD analyzed on 5/2/98 exceeded the UT. Associated positive results have been flagged "J". unless a more severe flag had to be applied for other deviations. 4) Dichlorodifluoromethane was recovered above the UT from the LCS and LCSD on 5/3/98. Associated results have already been flagged "R" due to calibration deviations, and no further flags have been applied. 5) The RPD for Boromobenzene in the LCS/LCSD on 5/3/98 exceeded the UT. All associated positive results have been flagged "J".
Laboratory Duplicate	None in this SDG
Holding Time	Holding times were met.
COC	No discrepancies were noted.
Comments	<ul style="list-style-type: none"> 1) Methylene Chloride was detected above the RL in the trip blank. This compound was also detected above the RL in the method blanks. Associated sample results less than 10 times the highest blank concentration have been flagged "U", unless a more severe flag had to be applied for other deviations. 2) Methylene chloride exceeded the 30% RSD criteria for the ICAL on 5/2/98. The associated sample results have been flagged "R". 3) The second-source calibration verification standard analyzed on 5/2/98 did not include the compounds Bromochloromethane and 1-chlorohexane. The associated sample results have been flagged "R". 4) The recoveries of Dichlorodifluoromethane, Chloromethane, and Bromomethane from the second-source calibration verification standard analyzed on 5/2/98 were not within 75-125% of the expected concentrations. The associated sample results have been flagged "R". 5) The recovery of Methylene Chloride from the LCSD analyzed on 5/2/98 was below the LT. Associated sample results have already been flagged "R" due to calibration deviation, therefore no further flags have been applied. 6) The recovery of 1,3,5-Trimethylbenzene from the LCSD analyzed on 5/2/98 was above the UT. This compound was not detected in the associated samples, and no flags have been applied. 7) The RPDs for Methylene Chloride, Isopropylbenzene, Bromobenzene, and n-Butylbenzene in the LCS/LCSD analyzed on 5/2/98 exceeded the UT. Associated positive results have been flagged "J". unless a more severe flag had to be applied for other deviations 8) Dichlorodifluoromethane was recovered above the UT from the LCS and LCSD on 5/3/98. Associated results have already been flagged "R" due to calibration deviations, and no further flags have been applied. 9) The RPD for Boromobenzene in the LCS/LCSD on 5/3/98 exceeded the UT. All associated positive results have been flagged "J".
Package Completion	<ul style="list-style-type: none"> 1) The documentation of out-of-control conditions in the case narrative is incomplete. For example, there is no mention of calibration verification deviations, the unacceptable recoveries of Methylene Chloride and 1,3,5-Trimethylbenzene from the LCSD on 5/2/98, or the unacceptable Methylene Chloride ICAL RSD. The case narrative erroneously states that all continuing calibration criteria were met. The case narrative addresses the laboratory's failure to comply with the method requirement to use regression equations for quantitation of compounds exceeding 15% RSD. The QAPP actually allows the use of either the average RRFs or regression equations for quantitation as long as the RSD is not >30%. 2) The results of second-source calibration verifications should be included in the summaries, and should be presented in terms of percent of the expected concentrations 3) The second-source calibration verification standard should include all target analytes

6521445

SDG	9804237
Project	NAS FW JRB AOC 2
Reviewer	TAD
Date	8/5/98
Method	SW8260A
Matrix	Water

Case Narrative

- 1) Methylene Chloride was detected above the RL in the method blanks. The compound was also detected in the samples.
- 2) Some compounds did not meet the criteria for the LCSs analyzed on 5/8/98 and 5/11/98
- 3) Samples 9804237-3, -4, -5, and -6 had to be reanalyzed at dilutions to bring target analytes into calibration range. These dilutions were performed outside holding time
- 4) The recovery of the surrogate 4-Bromofluorobenzene from sample 9804237-4DL was above the UT
- 5) Some samples were analyzed diluted due to the levels of analytes present

- 5) Dichlorodifluoromethane, Chloromethane, and Bromomethane did not meet the criteria for the second-source calibration verification standard analyzed on 5/2/98
- 5) The laboratory indicated that average response factors were used to quantitate all analytes, although some analytes had RSDs greater than 15% Method SW8260B requires use of regression equations in these cases
- 6) Samples -6 and -8 were analyzed diluted due to the concentrations of target analytes present.

Field Samples

Field Blanks No target analytes were detected above the RL in either the trip blank or the equipment blank.

Field Duplicates None in this SDG.

Form I Review A number of target analytes were detected above the RL in some of the samples.

Method Blanks Methylene Chloride was detected above the RL in the method blanks. Sample results less than 10 times the highest concentration found in the associated blank have been flagged "U", unless a more severe flag had to be applied for other deviations.

Surrogates The recovery of the surrogate 4-Bromofluorobenzene from sample 9804237-4DL was above the UT. All positive results have been flagged "J" unless a more severe flag had to be applied due to other deviations

Tuning and Mass C All criteria were met.

Internal Standard All criteria were met.

Initial Calibration

- 1. Chloromethane and Methylene Chloride exceeded the 30% RSD criteria for the ICAL on 5/6/98. The associated sample results have been flagged "R".
- 2) Chloromethane exceeded the 30% RSD criteria for the ICAL on 5/11/98. The associated sample results have been flagged "R"

Continuing Calibration

- 1) The second-source calibration verification standards analyzed on 5/6/98 and 5/11/98 did not include the compounds Bromochloromethane and 1-chlorohexane. The associated sample results have been flagged "R".
- 2) The recoveries of Dichlorodifluoromethane, Chloromethane, Vinyl Chloride, Bromomethane, Chloroethane, Trichlorofluoromethane, 1,1-Dichloroethene, trans-1,2-Dichloroethene, 1,1-Dichloroethane, 1,1,1-Trichloroethane, 2,2-Dichloropropane, Carbon Tetrachloride, 1,1-Dichloropropene, Tetrachloroethene, Dibromochloromethane, 1,1,1,2-Tetrachloroethane, m,p-Xylene, o-Xylene, n-Propylbenzene, 1,3,5-Trimethylbenzene, tert-Butylbenzene, 1,2,4-Trimethylbenzene, sec-Butylbenzene, 1,4-Dichlorobenzene, and Hexachlorobutadiene from the second-source calibration

6521446

	verification standard analyzed on 5/6/98 were not within 75-125% of the expected concentrations. The associated sample results have been flagged "R".
	3) The recoveries of Chloromethane, Vinyl Chloride, 1,2-Dichloroethane, 1,2-Dichloropropane, Dibromomethane, 1,1,2-Trichloroethane, Dibromochloromethane, Bromoform, n-Propylbenzene, sec-Butylbenzene, and 1,4-Dichlorobenzene from the second-source calibration verification standard analyzed on 5/11/98 were not within 75-125% of the expected concentrations All associated sample results have been flagged "R"
	4) The recoveries of Chloroethane and Hexachlorobutadiene from the continuing calibration standard analyzed on 5/8/98 were not within 75-125% of the expected concentrations The associated sample results have been flagged "R"
Matrix Spike	None in this SDG
Laboratory Control	The RPDs for 1,2-Dibromo-3-chloropropane from the LCS/LCSD on 5/8/98 and of Dichlorodifluoromethane from the LCS/LCSD on 5/11/98 exceeded the UT. All associated positive sample results have been flagged "J" unless a more severe flag had to be applied for other deviations
Laboratory Duplicate	None in this SDG.
Holding Time	Samples 9804237-3, -4, -5, and -6 had to be reanalyzed at dilutions to bring target analytes into calibration range. These dilutions were performed outside holding time.
COC	No discrepancies were noted.
Comments	<p>1) Methylene Chloride was detected above the RL in the method blanks Sample results less than 10 times the highest concentration found in the associated blank have been flagged "U", unless a more severe flag had to be applied for other deviations.</p> <p>2) The recovery of the surrogate 4-Bromofluorobenzene from sample 9804237-4DL was above the UT. All positive results have been flagged "J" unless a more severe flag had to be applied due to other deviations.</p> <p>3) Chloromethane and Methylene Chloride exceeded the 30% RSD criteria for the ICAL on 5/6/98 The associated sample results have been flagged "R".</p> <p>4) Chloromethane exceeded the 30% RSD criteria for the ICAL on 5/11/98 The associated sample results have been flagged "R"</p> <p>5) The second-source calibration verification standards analyzed on 5/6/98 and 5/11/98 did not include the compounds Bromochloromethane and 1-chlorohexane. The associated sample results have been flagged "R".</p> <p>6) The recoveries of Dichlorodifluoromethane, Chloromethane, Vinyl Chloride, Bromomethane, Chloroethane, Trichlorofluoromethane, 1,1-Dichloroethene, trans-1,2-Dichloroethene, 1,1-Dichloroethane, 1,1,1-Trichloroethane, 2,2-Dichloropropane, Carbon Tetrachloride, 1,1-Dichloropropene, Tetrachloroethene, Dibromochloromethane, 1,1,1,2-Tetrachloroethane, m,p-Xylene, o-Xylene, n-Propylbenzene, 1,3,5-Trimethylbenzene, tert-Butylbenzene, 1,2,4-Trimethylbenzene, sec-Butylbenzene, 1,4-Dichlorobenzene, and Hexachlorobutadiene from the second-source calibration verification standard analyzed on 5/6/98 were not within 75-125% of the expected concentrations The associated sample results have been flagged "R".</p> <p>7) The recoveries of Chloromethane, Vinyl Chloride, 1,2-Dichloroethane, 1,2-Dichloropropane, Dibromomethane, 1,1,2-Trichloroethane, Dibromochloromethane, Bromoform, n-Propylbenzene, sec-Butylbenzene, and 1,4-Dichlorobenzene from the second-source calibration verification standard analyzed on 5/11/98 were not within 75-125% of the expected concentrations All associated sample results have been flagged "R".</p> <p>8) The recoveries of Chloroethane and Hexachlorobutadiene from the continuing calibration standard analyzed on 5/8/98 were not within 75-125% of the expected concentrations The associated sample results have been flagged "R"</p> <p>9) The RPDs for 1,2-Dibromo-3-chloropropane from the LCS/LCSD on 5/8/98 and of Dichlorodifluoromethane from the LCS/LCSD on 5/11/98 exceeded the UT All associated positive sample results have been flagged "J" unless a more severe flag had to be applied for other deviations.</p> <p>10) Samples 9804237-3, -4, -5, and -6 had to be reanalyzed at dilutions to bring target analytes into calibration range. These dilutions were performed outside holding time.</p> <p>11)</p>
Package Completeness	<p>1) The documentation of out-of-control conditions in the case narrative is incomplete For example, there is no mention of ICAL, second-source calibration verification, and continuing calibration deviations 2) The case narrative erroneously states that all continuing calibration criteria were met.</p> <p>3) The case narrative addresses the laboratory's failure to comply with the method requirement to use regression equations for quantitation of compounds exceeding 15% RSD The QAPP actually allows the</p>

6521447

- use of either the average RRFs or regression equations for quantitation as long as the RSD is not >30%.
- 4) The results of second-source calibration verifications should be included in the summaries, and should be presented in terms of percent of the expected concentrations.
 - 5) The second-source calibration verification standard should include all target analytes.

6521448

CH2MHILL

NAS FW JRB AOC 2

Data Quality Evaluation

SDG 7154

Method RSK-175

Reviewer TAD

Date 7/30/98

Matrix Water

Senior Review Vito D'Aurora

Field Samples

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
-----------------	------------------	-----------------	------------------	-----------------	------------------

Water

AIB018EB1	ES	AIB019	LR	AIB019	N
AIB020	N	AIB022	N	AIB023FD1	FD
AIB024	N	AIB025	N	AIB026	N
AIB027	N	AIB028FD1	FD		

1. Case Narrative
Items of Interest No items of interest.

2. Blank Summary

Field Blanks No analyte was detected above the RL.

Method Blanks Methane was not detected above the RL.

3. Spikes and Duplicates

Field Duplicates All criteria were met.

6521449

7154 RSK-175

Page 2 of 7

Laboratory Duplicates All criteria were met.

Matrix Spike None in this SDG.

4. Laboratory Control Sample All criteria were met.

5. Surrogates NA

6. Tuning and Mass Calibration NA

7. Internal Standard NA

8. Calibration Information

Initial Calibration All criteria were met.

Continuing Calibration All criteria were met.

9. Holding Time All criteria were met.

10. Summary

General Comments All data were found to be acceptable.

Data Package Completeness 1) The case narrative indicates that there was no specified holding time for the parameter tested. The QAPP does specify a holding time of 14 days (7 days for unpreserved samples).
2) The laboratory used accuracy control limits of 80-120% for the LCS. The QAPP does allow wider control limits of 70-130%.

1011863
6521450

7154 RSK-175

Page 3 of 7

- 3) The data package was acceptable.

Forms Review/ Items of Interest Methane was detected above the RL in some samples.

COC Review No discrepancies were noted.

6521451

7154 RSK-175

Page 4 of 7

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIB019	ETHANE	0.7	U	U	0.06	0.69	µg/L	
	ETHENE	0.73			0.06	0.73	µg/L	
	METHANE	4.76			0.06	0.36	µg/L	
AIB020	ETHANE	0.68	U	U	0.06	0.68	µg/L	
	ETHENE	0.72			0.06	0.72	µg/L	
	METHANE	0.36			0.06	0.36	µg/L	
AIB022	ETHANE	20.9	U	U	0.06	0.66	µg/L	
	ETHENE	0.7			0.06	0.7	µg/L	
	METHANE	454			0.06	0.35	µg/L	
AIB023FD1	ETHANE	22.9	U	U	0.06	0.7	µg/L	
	ETHENE	0.74			0.06	0.74	µg/L	
	METHANE	503			0.06	0.37	µg/L	
AIB024	ETHANE	0.71	U	U	0.06	0.71	µg/L	
	ETHENE	0.75			0.06	0.75	µg/L	
	METHANE	11			0.06	0.37	µg/L	
AIB025	ETHANE	0.72	U	U	0.06	0.72	µg/L	
	ETHENE	0.76			0.06	0.76	µg/L	
	METHANE	22.2			0.06	0.38	µg/L	
AIB026	ETHANE	0.74	U	U	0.06	0.74	µg/L	
	ETHENE	0.77			0.06	0.77	µg/L	
	METHANE	0.38			0.06	0.38	µg/L	
AIB027	ETHANE	0.75	U	U	0.06	0.75	µg/L	
	ETHENE	0.79			0.06	0.79	µg/L	
	METHANE	0.39			0.06	0.39	µg/L	

7154 RSK-175

Page 5 of 7

11/06/06

6521452

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIB028FD1	ETHANE	0.73	U	U	0.06	0.73	µg/L	
	ETHENE	0.77	U	U	0.06	0.77	µg/L	
	METHANE	0.38	U	U	0.06	0.38	µg/L	

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery critena exceeded
BS%R	LCS percent recovery critena exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference critena exceeded
CVES	Calibration verification ending standard exceeded %D critena
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD critena
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference critena exceeded
IS<LCL	Internal standard response exceeded LCL critena
IS>UCL	Internal standard response exceeded UCL critena
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside critena
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD critena exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery critena exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD critera exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds critena
Sur%R	Surrogate recovery exceeds critena

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trp blank
TB<RL	Trp blank concentration less than RL
TB>RL	Trp blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFlag	Lab R flag removed, Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria
SCVMISS	Missing target analyte

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

NAS FW JRB AOC 2**Data Quality Evaluation****CH2MHILL****SDG 7163****Method RSK-175****Reviewer TAD****Date 7/30/98****Matrix Water**

Senior Review Vito D'Aurora

Field Samples

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
------------------------	-------------------------	------------------------	-------------------------	------------------------	-------------------------

Water

AIB021	N	AIB031EB1	EB	AIB032	LR
AIB032	N	AIB036	N	AIB037	N

1. Case Narrative**Items of Interest****No items of interest.****2. Blank Summary****Field Blanks** No analyte was detected above the RL.**Method Blanks** Methane was not detected above the RL.**3. Spikes and Duplicates****Field Duplicates** None in this SDG.**Laboratory Duplicates** All criteria were met.**Matrix Spike** None in this SDG.

4. Laboratory Control Sample All criteria were met.

5. Surrogates NA

6. Tuning and Mass
Calibration NA

7. Internal Standard NA

8. Calibration Information

Initial Calibration All criteria were met.

Continuing Calibration All criteria were met.

9. Holding Time All criteria were met.

10. Summary
General Comments All data were found to be acceptable.

Data Package Completeness 1) The case narrative indicates that there was no specified holding time for the parameter tested. The QAPP does specify a holding time of 14 days (7 days for unpreserved samples).
2) The laboratory used accuracy control limits of 80-120% for the LCS. The QAPP does allow wider control limits of 70-130%.
3) The data package was acceptable.

REC'D

6521457

7163 RSK-175

Page 3 of 6

Forms Review/ Items of Interest Methane was detected above the RL in some samples.

COC Review No discrepancies were noted.

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AIB021	ETHANE	0.7	U	U	0.06	0.7	µg/L	
	ETHENE	0.74	U	U	0.06	0.74	µg/L	
	METHANE	33.8			0.06	0.37	µg/L	
AIB032	ETHANE	2.81			0.06	0.64	µg/L	
	ETHENE	0.68	U	U	0.06	0.68	µg/L	
	METHANE	367			0.06	0.34	µg/L	
AIB036	ETHANE	0.68	U	U	0.06	0.68	µg/L	
	ETHENE	0.72	U	U	0.06	0.72	µg/L	
	METHANE	0.51			0.06	0.36	µg/L	
AIB037	ETHANE	0.85	U	U	0.06	0.85	µg/L	
	ETHENE	0.87	U	U	0.06	0.87	µg/L	
	METHANE	0.44	U	U	0.06	0.44	µg/L	

Validation Flag Abbreviations

Abbreviation	Validation Reason
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not requested
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlobal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

6521460

7163 RSK-175

Page 6 of 6

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trp blank
TB<RL	Trp blank concentration less than RL
TB>RL	Trp blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFlag	Lab R flag removed; Re-analysis confirmed matnx effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria
SCVMISS	Missing target analyte

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

NAS FW JRB AOC 2**Data Quality Evaluation****CH2MHILL****SDG C6554****Method RSK-175****Reviewer nh****Date 4/14/98****Matrix water**

Senior Review Vito D'Aurora

Field Samples Detects reported > the RL.

Field ID	QAQC Type	Field ID	QAQC Type	Field ID	QAQC Type
-----------------	------------------	-----------------	------------------	-----------------	------------------

Water

AHA056EB1	EB	AHA057	N	AHA058	N
AHA059	N	AHA062EB1	EB	AHA063	N
AHA063dup	LR	AHA064	N	AHA065	N
AHA066	N	AHA067	N	AHA068	N
AHA069FD1	FD				

**1. Case Narrative
Items of Interest**

1. No specified HT exists for this method.

2. Blank Summary**Field Blanks Methane not detected > the RL.****Method Blanks Methane not detected > the RL.****3. Spikes and Duplicates****Field Duplicates Methane detected in the field duplicate pair. The RPD criteria were met.**

6521462

C6554 RSK-175

Page 2 of 6

Laboratory Duplicates RPD criteria met for the duplicate.

Matrix Spike Cannot be performed for this method. A duplicate is analyzed instead.

4. Laboratory Control Sample Criteria were met.

5. Surrogates NA

6. Tuning and Mass Calibration NA

7. Internal Standard NA

8. Calibration Information

Initial Calibration Criteria were met.

Continuing Calibration Criteria were met.

9. Holding Time No specified HT exists for this method.

10. Summary

General Comments All criteria were met. No flagging needed.

Data Package Completeness Complete. Ethene and Ethane were included in the Edata; per Mark Bos 4/15/98-removed them. Lab reported to the RL not the MDL.

C6554 RSK-175

Page 3 of 6

Forms Review/ Items of Interest Detects reported > the RL.

COC Review Complete. Only Methane requested.

6521464

C6554 RSK-175

Page 4 of 6

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA057	METHANE	475				0.35	ug/L	
AHA058	METHANE	0.35	Final U	Lab U	MDL	RL 0.35	Units ug/L	Validation Reason
AHA059	METHANE	65.2			MDL	RL 0.37	Units ug/L	Validation Reason
AHA063	METHANE	194			MDL	RL 0.35	Units ug/L	Validation Reason
AHA064	METHANE	2.96			MDL	RL 0.35	Units ug/L	Validation Reason
AHA065	METHANE	0.36	Final U	Lab U	MDL	RL 0.36	Units ug/L	Validation Reason
AHA066	METHANE	111			MDL	RL 0.36	Units ug/L	Validation Reason
AHA067	METHANE	0.38			MDL	RL 0.35	Units ug/L	Validation Reason
AHA068	METHANE	0.4	Final U	Lab U	MDL	RL 0.4	Units ug/L	Validation Reason
AHA069FD1	METHANE	13.5			MDL	RL 0.45	Units ug/L	Validation Reason

A.M. 6521465

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not requested
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
JCSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlocal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatnx	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

6521466

C6554 RSK-175

Page 6 of 6

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Trip blank
TB<RL	Trip blank concentration less than RL
TB>RL	Trip blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISRFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

NAS FW JRB AOC 2**Data Quality Evaluation****CH2MHILL****SDG C6562****Method RSK-175**

Reviewer nh

Date 4/15/98

Matrix water

Senior Review Vito D'Aurora

Field Samples**Methane not detected > the RL.**

<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>	<u>Field ID</u>	<u>QAQC Type</u>
-----------------	------------------	-----------------	------------------	-----------------	------------------

Water

AHA071EB1	EB	AHA072	N	AHA073FD1	FD
AHA075	N	AHA075dup	LR		

**1. Case Narrative
Items of Interest**

1. No specified HT exists for this method.

2. Blank Summary

Field Blanks Methane not detected > the RL.

Method Blanks Methane not detected > the RL.

3. Spikes and Duplicates

Field Duplicates Methane not detected > the RL.

Laboratory Duplicates RPD criteria met for the duplicate.

Matrix Spike Cannot be performed for this method. A duplicate is analyzed instead.

6521468

C6562 RSK-175

Page 2 of 6

4. Laboratory Control Sample Criteria were met.

5. Surrogates NA

**6. Tuning and Mass
Calibration** NA

7. Internal Standard NA

8. Calibration Information

Initial Calibration Criteria were met.

Continuing Calibration Criteria were met.

9. Holding Time No specified HT exists for this method.

10. Summary

General Comments All criteria were met. No flagging needed.

Data Package Completeness Complete. Ethene and Ethane were included in the Edata; per Mark Bos
4/15/98-removed them. Lab reported to the RL not the MDL.

**Forms Review/ Items of
Interest** Methane not detected > the RL.

011503 6521469

C6562 RSK-175

Page 3 of 6

COC Review Complete. Only Methane requested.

Final Data Flags*

*When the data evaluation process results in multiple flags, the most severe flag becomes the final data flag. All flags are from the site-specific QAPP, except the "exclude" flag that is used to designate results that are not for risk assessment (for example, a result from a dilution where the original undiluted result is appropriate).

Field ID	Analyte	Result	Final Flag	Lab Flag	MDL	RL	Units	Validation Reason
AHA072	METHANE	0.34	U	U		0.34	ug/L	
AHA073FD1	METHANE	0.34	U	U		0.34	ug/L	
AHA075	METHANE	0.36	U	U		0.36	ug/L	

Validation Flag Abbreviations

<i>Abbreviation</i>	<i>Validation Reason</i>
<RL	Result less than the RL
>IC	Initial calibration low std. greater than the RL
>ICLinearRange	Result greater than linear calibration range
>ICVS	Exceeds ICVS %D criteria
>MDL<RL	Result between the MDL and RL
BD%R	LCSD percent recovery criteria exceeded
BS%R	LCS percent recovery criteria exceeded
CCB>RL	Continuing Calibration blank concentration exceeds RL
CF	Confirmation Result
CF>RPD	Confirmation Precision Exceeded
ChangeR	Lab R flag removed - Recovery within lab control limits
CV%D	Continuing calibration percent difference criteria exceeded
CVES	Calibration verification ending standard exceeded %D criteria
dilution	Dilution
Duplicate	Duplicate run
EB< RL	Equipment blank concentration less than the RL
EB>RL	Equipment blank concentration greater than the RL
exclude	Data not used; another value is appropriate or data was not required
FD>RPD	Field duplicate exceeds RPD criteria
HT>UCL	Holding time exceeded
IC%RSD	Initial calibration RSD exceeded
ICSS	Initial calibration verification standard was not analyzed
ICVS%D	Initial calibration verification percent difference criteria exceeded
IS<LCL	Internal standard response exceeded LCL criteria
IS>UCL	Internal standard response exceeded UCL criteria
LB<RL	Laboratory blank contamination less than the RL
LB>MDL	Laboratory blank contamination greater than the MDL
LB>RL	Laboratory blank contamination greater than the RL
LCS%R	LCS recovery outside criteria
LCSD	LCSD not required. No flags applied.
LCSDRPD	LCSD RPD criteria exceeded
Misc	Miscellaneous
MS%R	Matrix spike percent recovery criteria exceeded
MSGlocal	Global matrix spike flagging
MSRPD	Matrix spike RPD criteria exceedance
NoLCS	No LCS in the analytical batch
NotSameMatrix	Matrix inappropriately flagged
RE	Re-extraction and/or re-analysis
Re-analysis	Re-analysis
ReplaceMFlag	Lab M flag removed - Recovery within lab control limits
ReplaceRFlag	Lab R flag removed - Recovery within lab control limits
RL<MDL	RL less than the MDL
screen	Screening method
SD%R	Matrix spike duplicate recovery exceeds criteria
Sur%R	Surrogate recovery exceeds criteria

6521472

C6562 RSK-175

Page 6 of 6

sur<LCL	Surrogate recovery less than lower limit
Sur>UCL	Surrogate recovery greater than upper limit
TB	Tri p blank
TB<RL	Tri p blank concentration less than RL
TB>RL	Tri p blank concentration greater than the RL
TIC	Tentatively identified compound
RPD>UCL Confirm	Confirmation result RPD>UCL
IC%RSDConfirm	Initial calibration RSD exceeded for confirmation
ReplaceISFlag	Lab R flag removed; Re-analysis confirmed matrix effect on IS
CCVMissing	CCV analyte missing from calibration
SSCCV%D	Second Source Continuing Calibration exceeded %D criteria
ReplaceJFlag	Lab J flag removed - Serial Dilution compound within criteria

Qualifier Description

J = The analyte was positively identified, the quantitation is an estimate.

U = The analyte was analyzed for, but not detected. The associated numerical value is at or below the method detection limit (MDL).

F = The analyte was positively identified but the associated numerical value is below the reporting limit (RL).

R = The data are unusable because of deficiencies in the ability to analyze the sample and meet quality control (QC) criteria.

B = The analyte was found in an associated blank, as well as in the sample.

M = A matrix effect was present.

S = To be applied to all field screening data.

T = Tentatively identified compound (using gas chromatography/mass spectrometry [GC/MS])

UM = Same as "U", and a matrix effect was present.

UB = Same as "U", and the analyte was found in an associated blank.

exclude = Data not used in risk assessment. More appropriate data exist for this analyte.

none = A flag is not applied. This place holder is for calculating QC criteria issues without flagging.

6521473

TAB

G-4 METHANE SOP

15A147
6521471

Standard Operating Procedure for

**METHANE, ETHANE, AND ETHENE IN WATER BY GC-FID
WITH HEADSPACE GENERATION**

Prepared by:

CH2M Hill Inc.
Analytical Services
2300 NW Walnut Blvd
Corvallis, OR 97330

Approved by:

Scott T. Echols

Organics Supervisor

May 30, 1997

Date

John Stroj

Laboratory QA/QC Coordinator

May 30, 1997

Date

October 1997
Revision 1.3

6521475

The following information contains a proprietary method of CH2M Hill and is not to be copied, used, or disclosed in whole or in part without written permission from CH2M Hill. Items throughout this SOP have been deleted and marked proprietary.

METHANE, ETHANE, AND ETHENE IN WATER BY GC-FID WITH HEADSPACE GENERATION

1.0 Scope and Application

This method is applicable to the preparation of water samples for analysis of the headspace to quantify part-per-billion levels of dissolved methane, ethane, and ethene in water samples, by an equilibration technique utilizing the Henry's Law relationship.

Henry's law states that the equilibrium value of the mole fraction of gas dissolved in a liquid is directly proportional to the partial pressure of the gas above the liquid surface, or $x = p/H$, where p = equilibrium partial pressure of gas, x = mole fraction of dissolved gas, H = Henry's law constant. Henry's law is applicable at low concentrations and low partial pressures of a gas at or below one atmosphere pressure. Solubility data can be obtained from technical handbooks relating H values to temperature.

Procedures are based on *Dissolved Oxygen and Methane in Water by a GC Headspace Equilibration Technique* by D.H. Campbell and J.T. Wilson, found in *International Journal of Environmental Analytical Chemistry*, Vol. 36, pgs. 249-257. Specific techniques have been developed and customized to the CH2M HILL Analytical Services Laboratory in Corvallis, Oregon.

2.0 Target Analytes and Detection Limits

Analyte	CAS Number	Analytical MRL (ppm in headspace)	Typical Sample MRL† ($\mu\text{g/L}$ in sample)
Methane	74-82-8	1.0	0.38
Ethane	74-84-0	1.0	0.72
Ethene	74-85-1	1.0	0.76

† Sample Method Reporting Limit (MRL) depends on the volume of headspace generated.

3.0 Summary of Method

A water sample is collected, in the field or in the laboratory, in a borosilicate glass headspace vial with aluminum seals and Teflon faced butyl rubber septa. A headspace is prepared using high purity helium. The bottle is shaken for several minutes and a sample is taken from the headspace and injected onto a gas chromatographic column. Once on the column, the gaseous components are separated and detected by a flame ionization detector (GC/FID). By using Henry's law, the concentration of the gas in the headspace, the bottle volume, and temperature of the sample, the concentration of dissolved gas in the original water sample can be determined.

4.0 Interferences

- 4.1 Method interferences may be caused by contaminants in glassware and gases. A method blank must be analyzed with every batch to demonstrate there is no interference due to the syringe and helium, see (10.3.1).
- 4.2 During the headspace generation procedure, see (11.1), helium gas should be allowed to flow through the Teflon tubing and purge needle prior to preparation of samples.
- 4.3 Compounds that closely match the chromatographic retention times of the target analytes may result in false identification and/or cause a positive bias in the results.

5.0 Safety

All normal laboratory safety procedures should be followed at all times. This includes proper safety clothing, handling of combustible gases, handling of needles, etc.

6.0 Sample Collection, Preservation, and Storage

- 6.1 Grab samples must be collected in accordance with conventional sampling practices, using borosilicate glass headspace vials with aluminum seals and Teflon faced butyl rubber septa. Clear, 40-mL capacity vials are recommended. Use sample containers that are pre-cleaned by vendor and identified as being specific for organic parameters.
 - 6.1.1 Sampling containers and samples should not be preserved
 - 6.1.2 In the field, open the sample vial, set the cap in a clean place and collect the sample. Each sample should be collected in duplicate.
 - 6.1.3 Fill the vials to just overflowing. Do not rinse the vials, there should be a convex meniscus on the top of the vials.
 - 6.1.4 Place the cap directly over the top of the vial and screw down firmly. Do not over-tighten because the cap or the sample vial could break.
 - 6.1.5 Invert the vial gently. Look for air bubbles. If air bubbles appear, discard the sample and refill.

- 6.1.6 Each field sample must be labeled with sample date, monitoring well information, sample number, and initials of the person collecting the sample.
- 6.1.7 Put the headspace vial in the vial container and place in a sample cooler. Ice the cooler and transport to laboratory for analysis.
- 6.2 Samples must be refrigerated at 4°C and in a light-free environment until extraction. Technical holding time requirements are not available for this analysis, although it is recommended that analysis be performed within five days of sampling.

7.0 Apparatus and Materials

- 7.1 Analytical balance, capable of measuring ± 0.0001 g.
- 7.2 Gas chromatograph equipped with Headspace Autosampler—Hewlett Packard GC-5890, Series II and Hewlett Packard HS 7694. Equipped with flame ionization detector, splitless injection capability, temperature programming, and Microsoft-Windows compatible HP-ChemStation programming.
 - 7.2.1 Column -- GS-AL (J&W) 30 m \times 0.53 mm ID.
 - 7.2.2 Liquid Nitrogen for Cryogenic Program
- 7.3 Needles
- 7.4 pH paper
- 7.5 Teflon tubing
- 7.6 Borosilicate glass headspace vials with aluminum seals and Teflon faced butyl rubber septa (40 mL recommended)

8.0 Gases and Consumable Materials

- 8.1 Helium gas – Grade 5
- 8.2 Methane gas standards
 - 8.2.1 Mix 216 (1.00% Methane in Nitrogen; Scott Specialty Gases)
 - 8.2.2 1.00% Methane in Helium (Pacific Airgas)

8.2.3 4.00% Methane in Helium (Scott Specialty Gases)

8.3 Ethane gas standards

8.3.1 Mix 216 (1.00% Ethane in Nitrogen; Scott Specialty Gases)

8.3.2 1.00% Ethane in Nitrogen (Scott Specialty Gases)

8.4 Ethene gas standards

8.4.1 Mix 216 (1.00% Ethene in Nitrogen; Scott Specialty Gases)

8.4.2 1.00% Ethene in Nitrogen (Scott Specialty Gases)

9.0 Standards

Commercially available prepared methane, ethane, and ethene gas standards are used. Standards are certified by the manufacturer as to content and concentration of analyte. Standards with different lot numbers are used when such standards are from the same manufacturer.

9.1 Initial Calibration Standard

9.1.1 PROPRIETARY INFORMATION - NOT INCLUDED IN THIS SOP

9.2 Continuing Calibration Standard

9.2.1 PROPRIETARY INFORMATION - NOT INCLUDED IN THIS SOP

9.3 Laboratory Control Sample

9.3.1 PROPRIETARY INFORMATION - NOT INCLUDED IN THIS SOP

10.0 Quality Assurance

- 10.1 Before using this method, laboratory capability must be demonstrated by analyzing replicate samples. Seven replicates at approximately 1.0 ppmv must be analyzed to establish the method detection limit (MDL). A calculated MDL is determined annually in order to demonstrate laboratory capability meets or exceeds reporting limit for method, see attached (Table 1).

- 10.1.1 Calculate the variance and standard deviation of the seven replicate samples, [Equations 1 & 2]:

$$S^2 = (1/6) \times [\sum x_i^2 - (\sum x_i)^2 / 7] \quad \text{Equation 1}$$

$$S = (S^2)^{1/2} \quad \text{Equation 2}$$

where:

S^2 = variance

x_i = analyte concentration in sample

S = standard deviation

- 10.1.2 Calculate the MDL, [Equation 3]:

$$MDL = 3.143 \times S \quad \text{Equation 3}$$

where:

MDL = method detection limit

S = standard deviation

10.2 Initial calibration

- 10.2.1 The initial calibration curve is based on the linear fit of the calibration standard responses. By utilizing the least squares method of linear regression on all the standard points, a "best-fit" line is generated and serves as the calibration curve [Equations 4-6]:

$$m = \frac{2\sum(X_i Y_i) - \sum X_i \sum Y_i}{2\sum(X_i)^2 - (\sum X_i)^2} \quad \text{Equation 4}$$

$$b = \frac{\sum(X_i)^2 \sum Y_i - \sum X_i \sum(X_i Y_i)}{2\sum(X_i)^2 - (\sum X_i)^2} \quad \text{Equation 5}$$

$$y = mx_a + b \quad \text{Equation 6}$$

where:

m = slope

X_i = calibration standard concentration

Y_i = calibration standard peak area

b = y-intercept

y = area

x_a = concentration of analyte

- 10.2.2 A common measure of the "best-fit" line is called R^2 . This value represents how well the data points "fit" the regression line. If R^2 -values are <0.995, then the initial calibration must be redone.

10.2.3 PROPRIETARY INFORMATION - NOT INCLUDED IN THIS SOP

10.3 Quality control measures

10.3.1 Method blank or purge blank --

A method blank is defined as a reagent water sample in which a helium headspace is generated, and the headspace is analyzed with each batch of samples. A method blank must be analyzed for every batch of samples to a maximum of 20 samples. For each additional 20 or fewer samples, another method blank must be analyzed. Target analyte concentration in the method blank must be below the reporting limit.

10.3.2 Calibration check or continuing calibration --

A calibration check is defined as a standard used to verify quantitation. A calibration check must be analyzed for every batch of samples to a maximum of 10 samples. For each additional 10 or fewer samples, another calibration check must be analyzed. Analyte recovery for a calibration check must not be <80% or >120% of the standard.

10.3.3 Laboratory control sample --

A laboratory control sample (LCS) is defined as a standard from a secondary source used to verify quantitation. A LCS must be analyzed for every batch of samples to a maximum of 20 samples. For each additional 20 or fewer samples, another LCS/LCSD must be analyzed. Analyte recovery for a LCS/LCSD must not be <80% or >120% of the standard, and relative percent deviation (RPD) between the LCSD and LCS must not be >20%, [Equation 7]:

$$RPD = \frac{|X_{LCSD} - X_{LCS}|}{X_{LCSD} + X_{LCS}} \times 200 \quad \text{Equation 7}$$

where:

X_{LCSD} = analyte concentration in laboratory control sample duplicate
 X_{LCS} = analyzed concentration in laboratory control sample.

10.3.4 Duplicate --

A duplicate is defined as a replicate sample that is prepared and analyzed with each batch of samples. A duplicate must be prepared and analyzed for every batch of samples to a maximum of 20 samples. For each additional 20 or fewer samples, another duplicate must be prepared and analyzed. Relative percent deviation (RPD) between the duplicate and sample must not be >20%, [Equation 8]:

$$RPD = \frac{|X_d - X_s|}{X_d + X_s} \times 200 \quad \text{Equation 8}$$

where:

X_d = analyte concentration in duplicate
 X_s = analyte concentration in sample

10.3.5 QA/QC Summary

QC Measure	Frequency	Criterion
Method blank	1/20 samples	<MRL
Calibration check	1/10 samples	80-120% recovery
LCS/LCSD	1/20 samples	80-120% recovery
Duplicate	1/20 samples	<20% RPD
		<20% RPD

10.4 If the criterion for a QC measure is not met, the following possibilities should be considered:

10.4.1 Check calculations for possible errors

10.4.2 Check chromatograms for possible peak identification and/or peak integration errors.

- 10.4.3 Check sample identification numbers for possible mislabeling.
- 10.4.4 Check other QC measures to determine if the problem is isolated to one sample or characteristic of whole analysis batch.
- 10.4.5 If QC measures for the batch fail (e.g. blank, calibration check) take corrective actions and reanalyze before analyzing any samples.
- 10.4.6 Check instrument parameters and overall instrument performance.
- 10.4.7 If QC measures continually fail in spite of reanalysis (e.g. calibration check, LCS), then the instrument needs to be recalibrated.

11.0 Procedure

11.1 Headspace generation

PROPRIETARY INFORMATION - NOT INCLUDED IN THIS SOP

11.2 Analysis

PROPRIETARY INFORMATION - NOT INCLUDED IN THIS SOP

12.0 Gas Chromatography

12.1 PROPRIETARY INFORMATION - NOT INCLUDED IN THIS SOP

12.2 Qualitative analysis

- 12.2.1 Peak identification is based upon relative retention time comparison to the calibration standards. Retention times are established every batch of samples. A target analyte should be identified in a sample only if the chromatographic peak matches the predicted retention time within 0.2 minutes, [Equation 9]:

$$RT_{\text{diff}} = |RT_{\text{std}} - RT_{\text{samp}}| \quad \text{Equation 9}$$

where:

RT_{diff} = difference between actual and predicted retention times

RT_{std} = analyte retention time in calibration standard

RT_{samp} = analyte retention time in sample

- 12.2.2 Due to the variable nature of manual air-matrix injections, the predicted retention time difference should only serve as a recommended method of peak determination. Other chromatographic features such as peak shape, peak width, resolution, interference, and distance from the landmark peaks need to be considered.

12.3 Quantitative analysis

- 12.3.1 The HP ChemStation software automates the quantitation process by employing the calculations found in the following paragraphs. In order to manually duplicate the software calculations, the steps and equations have been provided.

- 12.3.2 The HP ChemStation software automates the analytical quantitation process.

- 12.3.3 PROPRIETARY INFORMATION - NOT INCLUDED IN THIS SOP

- 12.3.4 PROPRIETARY INFORMATION - NOT INCLUDED IN THIS SOP

- 12.3.5 PROPRIETARY INFORMATION - NOT INCLUDED IN THIS SOP

- 12.3.6 PROPRIETARY INFORMATION - NOT INCLUDED IN THIS SOP

12.4 Technical acceptance criteria

- 12.4.1 All specified QA/QC criteria for initial calibration, method blanks, LCS/LCSD, etc., must meet acceptance criteria, [see 10.3.5].. If there is an exception, [see 10.4], then this must be documented on the case narrative of the affected samples.

- 12.4.2 The target analyte concentrations must not exceed the highest calibration level. If there is an exception, then the sample is diluted to the point where the target analyte concentration will safely fall within the calibration range. This is done by preparing a second headspace

vial using the second sample collection vial followed by generation of a greater headspace volume.

- 12.4.3 At the GC analyst's discretion, any sample may be reanalyzed or new headspace generated. This may be done if the analyst feels that the sample results are "incorrect" or do not achieve expected values, despite positive QA/QC results.

13.0 Post-Analysis Procedures

- 13.1 Print chromatogram and report hard-copies for all samples.
- 13.2 Print sequence parameter and sample table hard-copies.
- 13.3 Report analytical results according to format requested on chain-of-custody or by prior agreement. Data deliverables without special considerations will follow normal CH2M Hill ASL level 1, 2, or 3 formats.
- 13.4 File chromatogram and report hard-copies by date. Label folder with date of analysis and test method.
- 13.5 File a copy of sample table with chromatograms, and file another copy in the run-log notebook.
- 13.6 Archive electronic data and sequence information by instrument ID and quarter/year. Also archive the methods used to generate the data.

6521486

Methane, Ethane, Ethene in water by GC/FID

October 1997

Revision 1.3

Table 1: Method Detection Limit Study

MDL Study [a]:
Determined 7/24/97

Compound	Run 1	Run 2	Run 3	Run 4	Run 5	Run 6	Run 7	Standard Deviation	MDL
Methane	0.796	0.730	0.717	0.763	0.757	0.679	0.652	0.050	0.171
Ethane	0.685	0.701	0.720	0.736	0.739	0.726	0.729	0.020	0.067
Ethene	0.732	0.745	0.806	0.787	0.778	0.791	0.775	0.026	0.089

Estimated Reporting Limits [b,c]:

Methane: 0.38 µg/L

Ethane: 0.72 µg/L

Ethene: 0.76 µg/L

- [a] All units in MDL study are expressed in ppmv.
- [b] Reporting limits in µg/L are based on a 1 ppmv in headspace reporting limit, a headspace of 7.40 mL, and a sample volume of 13.7 mL.
- [c] Reporting limits are estimated and will vary depending on concentration of compound in headspace, headspace volume, and water volume.

TAB

APPENDIX H INVESTIGATION-DERIVED WASTE DISPOSAL REPORT

6521488

10810 Sanden Drive
Dallas, TX 75238
Tel (214) 341-0628
Fax (214) 341-4291
www.safewatertech.com



Offices In:
DALLAS
NEW ORLEANS
LAFAYETTE

Ms. Karen McElroy
NAS Fort Worth JRB, Wastewater Program Manager
Environmental Department, Code N92
Bldg. 1501, Arnold Avenue
Fort Worth, Texas 76127

September 9, 1998

Subj: Discharge of IDW Water to Base Sanitary Sewer System

Dear Ms. McElroy:

On September 2, 1998, Safewater Technologies, Inc. (STI) discharged 2,388.48 gallons of investigation derived waste (IDW) water into the NAS Ft. Worth JRB sanitary sewer system. The discharge of the IDW water was performed for CH2MHILL, Dallas, Texas.

The manhole used to discharge the water is located immediately adjacent to the northwest corner of the former radar station building at Landfill 04/05. The identifying number for the manhole used to discharge the water was not available.

The water was discharged into the sanitary sewer system at approximately 7.96 gallons per minute (gpm).

The total time of the discharge event was approximately 5 hours.

If you have any questions or require additional information please contact Mr. Davis Cassell or myself at (214) 341-0628.

Sincerely,

SAFEWATER TECHNOLOGIES, INC.

Robert J. Schoeneweis, CPG, REP
General Manager

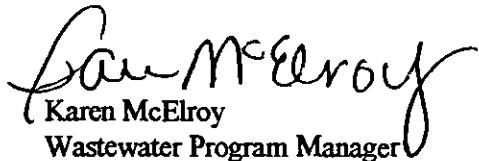
2 Sep 98

MEMO FOR RECORD

From: Karen McElroy, NAS JRB Fort Worth Wastewater Program Manager
To: Robert Schoenewe, Safewater Technologies, Inc.

Subj: **DISCHARGE OF GROUNDWATER MONITORING WELL WASTEWATER INTO
BASE SANITARY SEWER SYSTEM**

1. This memo is written to reflect Mr. Schoenewe's request to discharge monitoring well water into the base sanitary sewer system on 2 Sept 98.
2. After reviewing the analytical results of the above mentioned sampling event and verifying compliance with the effluent limitations set forth in the Wastewater Discharge Permit, I have determined that the subject wastewater can be disposed of into the sanitary sewer system.
3. This memo will serve as my authorization for Mr. Schoenewe to discharge the monitoring well wastewater into the base sanitary sewer system. I will need the following information for inclusion in the semi-annual pretreatment report submittal to the City of Fort Worth:
 - a) Exact amount discharged
 - b) Manhole used
 - c) Discharge flowrate
 - d) Total time of the event
4. Please contact me at (817) 377-9008 for any questions or comments you may have. I am available to provide any assistance you may need in the future.



Karen McElroy
Wastewater Program Manager



CSC Landfill
P.O. Box 236
Avalon, Texas 76623
(800) 256-9278
(972) 627-3461 Fax

Maloy Landfill
Route 1, Box 343
Campbell, Texas 75422
(903) 886-7832
(903) 886-4073 Fax

C & T Landfill
P.O. Box 316
Linn, Texas 78563
(210) 383-7398
(210) 383-5610 Fax



NON-HAZARDOUS WASTE PROFILE (MUST BE FILLED OUT COMPLETELY)

A. GENERATOR INFORMATION

1. Generator Name: NAS FT WORTH JRB

2. Site Location: _____

3. City: FT WORTH

State: TX

Zip: _____

4. Phone: (817) 731 6973 x13

5. Fax: (817) 731-8137

6. STATE FACILITY I.D. #: JXD57192404Z

7. STATE WASTE CODE #: 65004892

B. CUSTOMER INFORMATION

1. Customer Name: SAFEWATER TECHNOLOGIES

2. Address: 10510 SANDEN

3. City: DALLAS

State: TX

Zip: 75238

4. Phone: (214) 341-0628

5. Fax: (214) 341-4291

6. Contact: ROBERT J. SCHROEDER

7. Title: GENERAL MANAGER

C. WASTE STREAM INFORMATION

1. Common Name of Waste: SOIL

2. Detailed Description of Process Generating Waste and Material Description: DRILL CUTTINGS

3. Industrial Generator Yes No

4. Municipal Generator: Yes No

5. Physical State at 70°: Solid Semisolid Liquid Powder Combination

6. Odor: None Mild Semisolid (describe) _____

7. Color _____ 8. Flash Point N/A

9. Viscosity: Low Medium High

10. Reactive Yes No With: _____

11. pH Range: 7.0-14.0

12. Free Liquid: Yes No 13. Water Content: _____ % by Weight

14. Waste Category: Asbestos Containing Material Industrial Process Waste Sludge Demolition Debris
 Off Specification Products Spill Clean Up PST / TPH Soils Other IND SOILS

D. SUPPLEMENTAL INFORMATION

None MSD Sheets Analytical Data Memo/Letter Process Knowledge No. of Pages _____

E. SHIPPING INFORMATION

1. Packaging Bulk Solids Bulk Liquid Drum Roll-off Dump Trailer Tank Truck

2. Estimated Volume: _____ Tons Cubic Yards Gallons Other 37 55-GALLON DRUMS

3. Shipping Frequency: CHCCE Designated Landfill: AVTON

F. GENERATOR / CUSTOMER CERTIFICATION

I hereby certify that all information submitted within this and all attached documents contains true and accurate descriptions of this waste, that no deliberate or willful omissions of composition or properties exists, and that all known or suspected hazards have been disclosed. I further certify that the waste is not designated a Hazardous Waste defined by the USEPA at 40 CFR 261 nor does it contain PCB's regulated under TSCA 40 CFR 761.

Robert J. Schroeder, am employed by SAFEWATER TECHNOLOGIES, and am authorized to sign this request for
 (Name, Please Print)
AFBC/DC Elliot Smith Robert J. Schroeder, 2 Sep 98
 (Company Name) (Signature) (Date)

G. LANDFILL USE ONLY (DO NOT WRITE WITHIN THIS SPACE)

Compliance Officer _____

State Fee Applicable Class I

Yes No

Date _____

State Fee Applicable MSW

Yes No

Additional Information _____

Waste Disposal Agreement on File

Yes No

Surety Agreement on File

Yes No N/A

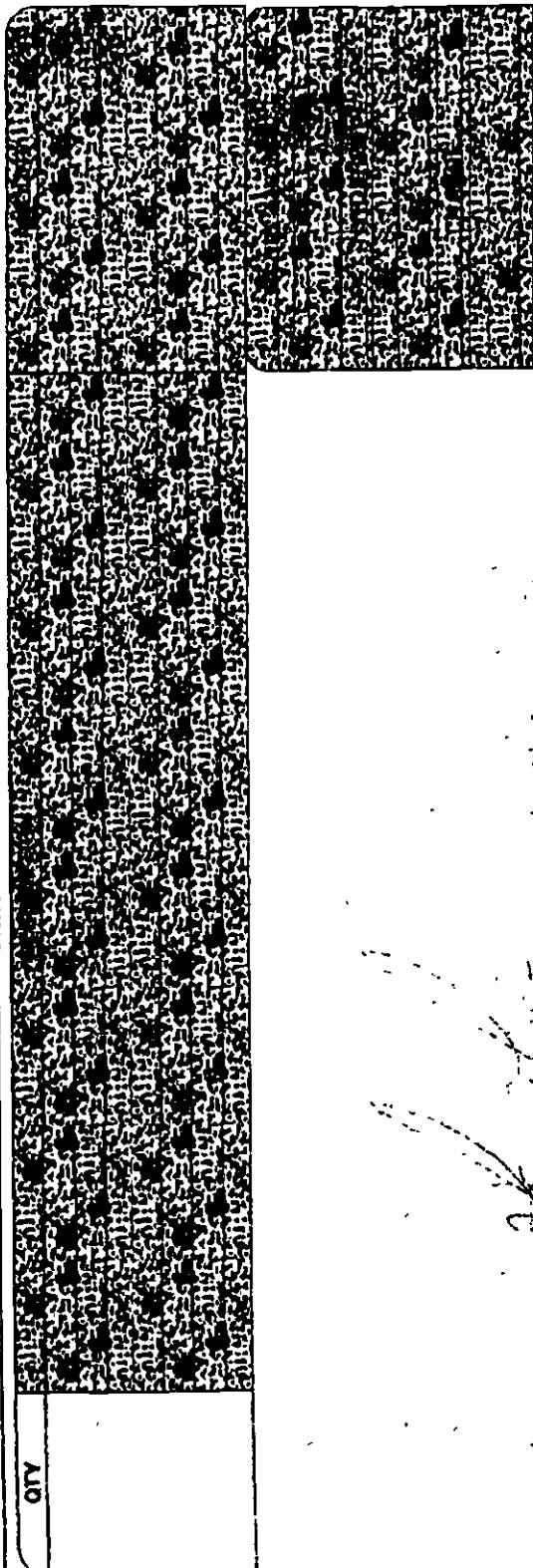
JOB # _____

09-13-98 03:30PM FROM IT TRANSPORTATION

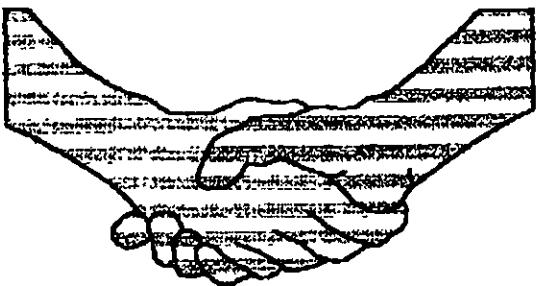
19 9214341423

۲۰۰

6521491



SIGNATURE



6521492

APPROVAL

Date: 09/3/98
To: SAFEWATER
Attention: ROBERT S.
Fax Number: 214-341-4291
From: Pam Miller

**Your Waste Stream Has Been Approved For Disposal At
Republic/CSC Landfill**

Generator: NAS FT WORTH
Reference: CARSWELL AFB
Waste Code: 65004892

Description: SOIL
Job Number: 1908980975

**Please Reference This Job Number On All Manifests
And Correspondence Related To This Waste Stream.**

**Thank You For Selecting CSC Disposal & Landfill, Inc.
A Republic Industries Company**



ANACHEM INC.

8 Prestige Circle, Suite 104 Allen, Texas 75002
972/727-9003 • FAX # 972/727-9686 • 1-800-966-1186

Customer Name: Safewater Technologies, Inc.
Date Received: August 24, 1998 at 12:30:00
Date Reported: August 27, 1998
Submission #: 9808000410
Project: CH2M HILL - CARSWELL

SAMPLES The submission consisted of 3 samples with sample I.D.'s shown in the attached data tables.

TESTS The samples listed in the attached result pages were analyzed for:

- * ICP SCAN (EPA 200.7)
- * ICP SCAN (EPA 6010)
- * MICROWAVE DIGESTION (EPA 3015) LIQUID
- * MICROWAVE DIGESTION (EPA 3051) SOLID
- * SEMI-VOLATILES APPENDIX IX (EPA 8270)
- * VOLATILES (EXPANDED EPA 8260)

Distribution Of Reports

1-Mr. Davis Cassell of Safewater Technologies, Inc.
Ph. 214-341-0628 Fax 214-341-4291

Respectfully Submitted,
Anachem, Inc.

C.H. Newton for
Howard H. Hayden, B.S.
Chemist

C.H. Newton
C.E. Newton, Ph.D.
Chemist

Submission #: 9808000410 lims

NOTE: Submitted material will be retained for 60 days unless notified or consumed in analysis. Material determined to be hazardous will be returned or a \$20 disposal fee will be assessed. Our letters and reports are for the exclusive use of the client to whom they are addressed. The use of our name must receive our prior written approval. Our letters and reports apply to the sample tested and/or inspected, and are not necessarily indicative of the qualities of apparently identical or similar materials.

113673 to 113675

Page 1 of 16

6521494

Client Name: Safewater Technologies, Inc.
 Submission #: 9808000410
 Project Name: CH2M HILL - CARSWELL
 Report Date: 08/27/98

Client Sample #: 527 082498 - 11

Laboratory ID #: 113673 Order Type: Normal Matrix: Liquid
 Sample Container: 2xVOA Vial,Liter Amber,Plastic Bottle
 Sampling Location: FT. WORTH, TX
 Sampling Date: 08/24/98
 Temperature (Celcius): 4

ICP SCAN (EPA 200.7)

<u>Analyte</u>	<u>Results(mg/l)</u>	<u>Detection Limit</u>
Silver	<0.030	0.030
Aluminum	2.08	0.040
Antimony	<0.033	0.033
Arsenic	<0.061	0.061
Barium	0.079	0.001
Beryllium	<0.002	0.002
Cadmium	<0.008	0.008
Calcium	23.9	0.001
Chromium	<0.0075	0.0075
Cobalt	<0.011	0.011
Copper	<0.007	0.007
Iron	32.8	0.005
Lead	<0.040	0.040
Lithium	0.120	0.001
Magnesium	0.424	0.030
Manganese	0.308	0.002
Molybdenum	<0.0086	0.0086
Nickel	<0.016	0.016
Potassium	4.36	0.010
Selenium	<0.050	0.050
Sodium	145	0.001
Strontium	0.164	0.0013
Thallium	<0.043	0.043
Tin	<0.023	0.023
Titanium	<0.008	0.008
Vanadium	<0.010	0.010
Zinc	0.013	0.005

MICROWAVE DIGESTION (EPA 3015) LIQUID

Microwave Digestion Date: 08/26/98

SEMI-VOLATILES APPENDIX IX (EPA 8270)

Semi-Volatile prep date: 08/26/98

<u>Analyte</u>	<u>Results(ug/l)</u>	<u>Detection Limit</u>
Acenaphthene	<10	10
Acenaphthylene	<10	10
Acetophenone	<10	10
2-Acetylaminofluorene	<10	10
4-Aminobiphenyl	<10	10
Aniline	<50	50
Anthracene	<10	10
Benzidine	<50	50
Benzo (a) anthracene	<10	10
Benzo (a) pyrene	<20	20
Benzo (b) fluoranthene	<20	20
Benzo (g,h,i) perylene	<10	10
Benzo (k) fluoranthene	<20	20
Benzoic Acid	<50	50
Benzyl Alcohol	<20	20
4-Bromophenyl phenyl ether	<20	20

Client Name: Safewater Technologies, Inc.
 Submission #: 9808000410
 Project Name: CH2M HILL - CARSWELL
 Report Date: 08/27/98

SEMI-VOLATILES APPENDIX IX (EPA 8270)

Analyte	Results(ug/l)	Detection Limit
Butylbenzylphthalate	<20	20
Carbazole	<20	20
4-Chloro-3-methylphenol	<20	20
4-Chloroaniline	<20	20
bis (2-Chloroethoxy) methane	<10	10
bis(2-Chloroethyl) ether	<10	10
bis(2-Chloroisopropyl) ether	<20	20
2-Chloronaphthalene	<10	10
2-Chlorophenol	<10	10
4-Chlorophenyl-phenylether	<20	20
Chrysene	<10	10
Dibenz (a,h) anthracene	<50	50
Dibenzofuran	<50	50
1,3-Dichlorobenzene	<10	10
1,4-Dichlorobenzene	<10	10
1,2-Dichlorobenzene	<10	10
3,3'-Dichlorobenzidine	<10	10
2,4-Dichlorophenol	<20	20
2,6-Dichlorophenol	<10	10
Diethylphthalate	<20	20
2,4-Dimethylphenol	<20	20
Dimethylphthalate	<20	20
p-(Dimethylamino)azobenzene	<10	10
7,12-Dimethylbenz(a)anthracene	<10	10
3,3'-Dimethylbenzidine	<10	10
a,a-Dimethylphenethylamine	<10	10
1,3-Dinitrobenzene	<10	10
Di-n-butylphthalate	<20	20
4,6-Dinitro-2-methylphenol	<20	20
2,4-Dinitrophenol	<20	20
2,6-Dinitrotoluene	<20	20
2,4-Dinitrotoluene	<20	20
Di-n-octylphthalate	<20	20
bis (2-Ethylhexyl) phthalate	<20	20
Dinoseb	<10	10
Diphenylamine	<10	10
Ethyl Methanesulfonate	<10	10
Fluoranthene	<20	20
Fluorene	<10	10
Hexachlorobenzene	<10	10
Hexachlorobutadiene	<10	10
Hexachlorocyclopentadiene	<10	10
Hexachloroethane	<10	10
Hexachlorophene	<10	10
Hexchloropropylene	<10	10
Indeno (1,2,3-cd) pyrene	<10	10
Isophorone	<20	20
Isosafrole	<10	10
Methapyrilene (HCl)	<10	10
3-Methylcholanthrene	<10	10
Methyl Methanesulfonate	<10	10
2-Methylnaphthalene	<10	10
2-Methylphenol	<20	20
3-Methylphenol	<10	10
4-Methylphenol	<20	20
Naphthalene	<10	10
1,4-Naphthoquinone	<10	10
1-Naphthylamine	<10	10

6521496

Client Name: Safewater Technologies, Inc.
 Submission #: 9808000410
 Project Name: CH2M HILL - CARSWELL
 Report Date: 08/27/98

SEMI-VOLATILES APPENDIX IX (EPA 8270)

Analyte	Results(ug/l)	Detection Limit
2-Naphthylamine	<10	10
2-Nitroaniline	<20	20
4-Nitroaniline	<50	50
3-Nitroaniline	<50	50
Nitrobenzene	<20	20
2-Nitrophenol	<20	20
4-Nitrophenol	<20	20
4-Nitroquinoline-1-oxide	<10	10
N-Nitrosodi-n-butylamine	<10	10
N-Nitrosodiethylamine	<10	10
N-Nitrosodimethylamine	<50	50
N-Nitrosodi-n-propylamine	<10	10
N-Nitrosodiphenylamine	<20	20
N-Nitrosomethylethylamine	<10	10
N-Nitrosomorpholine	<10	10
N-Nitrosopyrrolidine	<10	10
5-Nitro-o-Toluidine	<10	10
Pentachlorobenzene	<10	10
Pentachloronitrobenzene	<10	10
Pentachloroethane	<10	10
Pentachlorophenol	<25	25
Phenacetin	<10	10
Phenanthrene	<10	10
Phenol	<10	10
p-Phenylenediamine	<10	10
Phorate	<10	10
2-Picoline	<10	10
Pyrene	<10	10
Pyridine	<10	10
Safrole	<10	10
1,2,4,5-Tetrachlorobenzene	<10	10
2,3,4,6-Tetrachlorophenol	<10	10
o-Toluidine	<10	10
1,2,4-Trichlorobenzene	<10	10
2,4,6-Trichlorophenol	<20	20
2,4,5-Trichlorophenol	<20	20
1,3,5-Trinitrobenzene	<10	10

VOLATILES (EXPANDED EPA 8260)

Date Analyzed: 08/24/98

Analyte	Results(ug/l)	Detection Limit
Acetone	<10	10
Benzene	<5.0	5.0
Bromobenzene	<5.0	5.0
Bromochloromethane	<15	15
Bromoform	<10	10
2-Butanone (MEK)	<20	20
Butyl Benzene (total)	<10	10
Carbon Disulfide	<10	10
Carbon Tetrachloride	<3.0	3.0
Chlorobenzene	<5.0	5.0
Chlorodibromomethane	<5.0	5.0
Chloroethane	<10	10
Chloroform	<10	10
Chlorotoluenes (total)	<10	10
1,2-Dibromo-3-chloropropane	<5.0	5.0
1,2-Dibromoethane	<10	10
Dibromomethane	<10	10

REF ID:
6521497

Client Name: Safewater Technologies, Inc.
 Submission #: 9808000410
 Project Name: CH2M HILL - CARSWELL
 Report Date: 08/27/98

VOLATILES (EXPANDED EPA 8260)

<u>Analyte</u>	<u>Results(ug/l)</u>	<u>Detection Limit</u>
1,2-Dichlorobenzene	<5.0	5.0
1,3-Dichlorobenzene	<5.0	5.0
1,4-Dichlorobenzene	<5.0	5.0
Dichlorobromomethane	<3.0	3.0
Dichlorodifluoromethane	<10	10
1,1-Dichloroethane	<5	5
1,2-Dichloroethane	<5.0	5.0
cis-1,2-Dichloroethene	<5.0	5.0
trans-1,2-Dichloroethene	<10	10
1,1-Dichloroethene	<5.0	5.0
1,2-Dichloropropane	<6.0	6.0
2,2-Dichloropropane	<5.0	5.0
cis-1,3-Dichloropropene	<6.0	6.0
trans-1,3-Dichloropropene	<6.0	6.0
1,1-Dichloropropene	<10	10
Ethyl Benzene	<8.0	8.0
Hexachlorobutadiene	<10	10
2-Hexanone	<10	10
Isopropyl Benzene	<5.0	5.0
p-Isopropyl toluene	<5.0	5.0
4-Methyl-2-Pentanone	<5.0	5.0
Methyl Bromide	<10	10
Methyl Chloride	<10	10
Methylene Chloride	<15	15
Naphthalene	<10	10
n-Propyl benzene	<5.0	5.0
Styrene	<10	10
1,1,2,2-Tetrachloroethane	<5.0	5.0
1,1,1,2-Tetrachloroethane	<10	10
Tetrachloroethene	<3.0	3.0
Toluene	<3.0	3.0
Trichlorobenzenes (total)	<15	15
1,1,1-Trichloroethane	<5.0	5.0
1,1,2-Trichloroethane	<5.0	5.0
Trichloroethene	<5.0	5.0
Trichlorofluoromethane	<10	10
1,2,3-Trichloropropane	<5.0	5.0
Trimethylbenzenes (total)	<10	10
Vinyl Acetate	<5.0	5.0
Vinyl Chloride	<2.0	2.0
Xylene (Total)	<10	10

Client Sample #: 527 082498 - I2

Laboratory ID #: 113674 Order Type: Normal Matrix: Liquid
 Sample Container: 2xVOA Vial,Liter Amber,Plastic Bottle
 Sampling Location: FT. WORTH, TX
 Sampling Date : 08/24/98
 Temperature (Celcius): 4

ICP SCAN (EPA 200.7)

<u>Analyte</u>	<u>Results(mg/l)</u>	<u>Detection Limit</u>
Silver	<0.030	0.030
Aluminum	2.03	0.040
Antimony	<0.033	0.033
Arsenic	<0.061	0.061
Barium	0.101	0.001
Beryllium	<0.002	0.002

6521498

Client Name: Safewater Technologies, Inc.
 Submission #: 9808000410
 Project Name: CH2M HILL - CARSWELL
 Report Date: 08/27/98

ICP SCAN (EPA 200.7)

<u>Analyte</u>	<u>Results(mg/l)</u>	<u>Detection Limit</u>
Cadmium	<0.008	0.008
Calcium	24.2	0.001
Chromium	<0.0075	0.0075
Cobalt	<0.011	0.011
Copper	<0.007	0.007
Iron	37.6	0.005
Lead	<0.040	0.040
Lithium	0.121	0.001
Magnesium	4.82	0.030
Manganese	0.505	0.002
Molybdenum	<0.0086	0.0086
Nickel	<0.016	0.016
Potassium	4.29	0.010
Selenium	<0.050	0.050
Sodium	141	0.001
Strontium	0.164	0.0013
Thallium	<0.043	0.043
Tin	<0.023	0.023
Titanium	<0.008	0.008
Vanadium	<0.010	0.010
Zinc	<0.005	0.005

MICROWAVE DIGESTION (EPA 3015) LIQUID

Microwave Digestion Date: 08/26/98

SEMI-VOLATILES APPENDIX IX (EPA 8270)

Semi-Volatile prep date: 08/26/98

<u>Analyte</u>	<u>Results(ug/l)</u>	<u>Detection Limit</u>
Acenaphthene	<10	10
Acenaphthylene	<10	10
Acetophenone	<10	10
2-Acetylaminofluorene	<10	10
4-Aminobiphenyl	<10	10
Aniline	<50	50
Anthracene	<10	10
Benzidine	<50	50
Benzo (a) anthracene	<10	10
Benzo (a) pyrene	<20	20
Benzo (b) fluoranthene	<20	20
Benzo (g,h,i) perylene	<10	10
Benzo (k) fluoranthene	<20	20
Benzoic Acid	<50	50
Benzyl Alcohol	<20	20
4-Bromophenyl phenyl ether	<20	20
Butylbenzylphthalate	<20	20
Carbazole	<20	20
4-Chloro-3-methylphenol	<20	20
4-Chloroaniline	<20	20
bis (2-Chloroethoxy) methane	<10	10
bis(2-Chloroethyl) ether	<10	10
bis(2-Chloroisopropyl) ether	<20	20
2-Chloronaphthalene	<10	10
2-Chlorophenol	<10	10
4-Chlorophenyl-phenylether	<20	20
Chrysene	<10	10
Dibenz (a,h) anthracene	<50	50
Dibenzofuran	<50	50
1,3-Dichlorobenzene	<10	10

6521499

Client Name: Safewater Technologies, Inc.
 Submission #: 9808000410
 Project Name: CH2M HILL - CARSWELL
 Report Date: 08/27/98

SEMI-VOLATILES APPENDIX IX (EPA 8270)

Analyte	Results(ug/l)	Detection Limit
1,4-Dichlorobenzene	<10	10
1,2-Dichlorobenzene	<10	10
3,3'-Dichlorobenzidine	<10	10
2,4-Dichlorophenol	<20	20
2,6-Dichlorophenol	<10	10
Diethylphthalate	<20	20
2,4-Dimethylphenol	<20	20
Dimethylphthalate	<20	20
p-(Dimethylamino)azobenzene	<10	10
7,12-Dimethylbenz(a)anthracene	<10	10
3,3'-Dimethylbenzidine	<10	10
a,a-Dimethylphenethylamine	<10	10
1,3-Dinitrobenzene	<10	10
Di-n-butylphthalate	<20	20
4,6-Dinitro-2-methylphenol	<20	20
2,4-Dinitrophenol	<20	20
2,6-Dinitrotoluene	<20	20
2,4-Dinitrotoluene	<20	20
Di-n-octylphthalate	<20	20
bis (2-Ethylhexyl) phthalate	<20	20
Dinoseb	<10	10
Diphenylamine	<10	10
Ethyl Methanesulfonate	<10	10
Fluoranthene	<20	20
Fluorene	<10	10
Hexachlorobenzene	<10	10
Hexachlorobutadiene	<10	10
Hexachlorocyclopentadiene	<10	10
Hexachloroethane	<10	10
Hexachlorophene	<10	10
Hexachloropropylene	<10	10
Indeno (1,2,3-cd) pyrene	<10	10
Isophorone	<20	20
Isosafrole	<10	10
Methapyrilene (HCl)	<10	10
3-Methylcholanthrene	<10	10
Methyl Methanesulfonate	<10	10
2-Methylnaphthalene	<10	10
2-Methylphenol	<20	20
3-Methylphenol	<10	10
4-Methylphenol	<20	20
Naphthalene	<10	10
1,4-Naphthoquinone	<10	10
1-Naphthylamine	<10	10
2-Naphthylamine	<10	10
2-Nitroaniline	<20	20
4-Nitroaniline	<50	50
3-Nitroaniline	<50	50
Nitrobenzene	<20	20
2-Nitrophenol	<20	20
4-Nitrophenol	<20	20
4-Nitroquinoline-1-oxide	<10	10
N-Nitrosodi-n-butylamine	<10	10
N-Nitrosodiethylamine	<10	10
N-Nitrosodimethylamine	<50	50
N-Nitrosodi-n-propylamine	<10	10
N-Nitrosodiphenylamine	<20	20
N-Nitrosomethylethylamine	<10	10

6521500

Client Name: Safewater Technologies, Inc.
 Submission #: 9808000410
 Project Name: CH2M HILL - CARSWELL
 Report Date: 08/27/98

SEMI-VOLATILES APPENDIX IX (EPA 8270)

<u>Analyte</u>	<u>Results(ug/l)</u>	<u>Detection Limit</u>
N-Nitrosomorpholine	<10	10
N-Nitrosopyrrolidine	<10	10
5-Nitro-o-Toluidine	<10	10
Pentachlorobenzene	<10	10
Pentachloronitrobenzene	<10	10
Pentachloroethane	<10	10
Pentachlorophenol	<25	25
Phenacetin	<10	10
Phenanthrene	<10	10
Phenol	<10	10
p-Phenylenediamine	<10	10
Phorate	<10	10
2-Picoline	<10	10
Pyrene	<10	10
Pyridine	<10	10
Safrole	<10	10
1,2,4,5-Tetrachlorobenzene	<10	10
2,3,4,6-Tetrachlorophenol	<10	10
o-Toluidine	<10	10
1,2,4-Trichlorobenzene	<10	10
2,4,6-Trichlorophenol	<20	20
2,4,5-Trichlorophenol	<20	20
1,3,5-Trinitrobenzene	<10	10

VOLATILES (EXPANDED EPA 8260)

Date Analyzed: 08/24/98

<u>Analyte</u>	<u>Results(ug/l)</u>	<u>Detection Limit</u>
Acetone	<10	10
Benzene	<5.0	5.0
Bromobenzene	<5.0	5.0
Bromoform	<15	15
Bromoform	<10	10
2-Butanone (MEK)	<20	20
Butyl Benzene (total)	<10	10
Carbon Disulfide	<10	10
Carbon Tetrachloride	<3.0	3.0
Chlorobenzene	<5.0	5.0
Chlorodibromomethane	<5.0	5.0
Chloroethane	<10	10
Chloroform	<10	10
Chlorotoluenes (total)	<10	10
1,2-Dibromo-3-chloropropane	<5.0	5.0
1,2-Dibromoethane	<10	10
Dibromomethane	<10	10
1,2-Dichlorobenzene	<5.0	5.0
1,3-Dichlorobenzene	<5.0	5.0
1,4-Dichlorobenzene	<5.0	5.0
Dichlorobromomethane	<3.0	3.0
Dichlorodifluoromethane	<10	10
1,1-Dichloroethane	<5	5
1,2-Dichloroethane	<5.0	5.0
cis-1,2-Dichloroethene	<5.0	5.0
trans-1,2-Dichloroethene	<10	10
1,1-Dichloroethene	<5.0	5.0
1,2-Dichloropropane	<6.0	6.0
2,2-Dichloropropane	<5.0	5.0
cis-1,3-Dichloropropene	<6.0	6.0
trans-1,3-Dichloropropene	<6.0	6.0

Client Name: Safewater Technologies, Inc.
 Submission #: 9808000410
 Project Name: CH2M HILL - CARSWELL
 Report Date: 08/27/98

VOLATILES (EXPANDED EPA 8260)

<u>Analyte</u>	<u>Results(ug/l)</u>	<u>Detection Limit</u>
1,1-Dichloropropene	<10	10
Ethyl Benzene	<8.0	8.0
Hexachlorobutadiene	<10	10
2-Hexanone	<10	10
Isopropyl Benzene	<5.0	5.0
p-Isopropyl toluene	<5.0	5.0
4-Methyl-2-Pentanone	<5.0	5.0
Methyl Bromide	<10	10
Methyl Chloride	<10	10
Methylene Chloride	<15	15
Naphthalene	<10	10
n-Propyl benzene	<5.0	5.0
Styrene	<10	10
1,1,2,2-Tetrachloroethane	<5.0	5.0
1,1,1,2-Tetrachloroethane	<10	10
Tetrachloroethene	<3.0	3.0
Toluene	<3.0	3.0
Trichlorobenzenes (total)	<15	15
1,1,1-Trichloroethane	<5.0	5.0
1,1,2-Trichloroethane	<5.0	5.0
Trichloroethene	<5.0	5.0
Trichlorofluoromethane	<10	10
1,2,3-Trichloropropane	<5.0	5.0
Trimethylbenzenes (total)	<10	10
Vinyl Acetate	<5.0	5.0
Vinyl Chloride	<2.0	2.0
Xylene (Total)	<10	10

Client Sample #: 527 082498 - S1

Laboratory ID #: 113675 Order Type: Normal Matrix: Soil
 Sample Container: 4x4oz EPA Approved Glass Jar\Aqua Lid
 Sampling Location: FT. WORTH, TX
 Sampling Date: 08/24/98
 Temperature (Celcius): 4

ICP SCAN (EPA 6010)

<u>Analyte</u>	<u>Results(mg/kg)</u>	<u>Detection Limit</u>
Silver	<0.3	0.3
Aluminum	44.9	0.4
Antimony	<0.33	0.33
Arsenic	<0.61	0.61
Barium	0.581	0.01
Beryllium	<0.02	0.02
Cadmium	<0.09	0.09
Calcium	737	0.01
Chromium	0.082	0.075
Cobalt	<0.11	0.11
Copper	<0.07	0.07
Iron	74.9	0.05
Lead	<0.4	0.4
Lithium	0.116	0.01
Magnesium	13.8	0.3
Manganese	2.98	0.02
Molybdenum	<0.086	0.086
Nickel	<0.16	0.16
Potassium	4.29	0.1
Selenium	<0.5	0.5

6521502

Client Name: Safewater Technologies, Inc.
Submission #: 9808000410
Project Name: CH2M HILL - CARSWELL
Report Date: 08/27/98

ICP SCAN (EPA 6010)

<u>Analyte</u>	<u>Results(mg/kg)</u>	<u>Detection Limit</u>
Sodium	4.48	0.01
Strontium	0.937	0.014
Thallium	<0.43	0.43
Tin	<0.236	0.236
Titanium	0.406	0.08
Vanadium	<0.10	0.10
Zinc	0.133	0.05

MICROWAVE DIGESTION (EPA 3051) SOLID

Microwave Digestion Date: 08/26/98

SEMI-VOLATILES APPENDIX IX (EPA 8270)

Semi-Volatile prep date: 08/24/98

<u>Analyte</u>	<u>Results(ug/kg)</u>	<u>Detection Limit</u>
Acenaphthene	<330	330
Acenaphthylene	<330	330
Acetophenone	<330	330
2-Acetylaminofluorene	<330	330
4-Aminobiphenyl	<330	330
Aniline	<1650	1650
Anthracene	<330	330
Benzidine	<2500	2500
Benzo (a) anthracene	<330	330
Benzo (a) pyrene	<660	660
Benzo (b) fluoranthene	<660	660
Benzo (g,h,i) perylene	<330	330
Benzo (k) fluoranthene	<660	660
Benzoic Acid	<1650	1650
Benzyl Alcohol	<660	660
4-Bromophenyl phenyl ether	<660	660
Butylbenzylphthalate	<660	660
Carbazole	<660	660
4-Chloro-3-methylphenol	<660	660
4-Chloroaniline	<660	660
bis (2-Chloroethoxy) methane	<330	330
bis(2-Chloroethyl) ether	<330	330
bis(2-Chloroisopropyl) ether	<660	660
2-Chloronaphthalene	<330	330
2-Chlorophenol	<330	330
4-Chlorophenyl-phenylether	<660	660
Chrysene	<330	330
Dibenz (a,h) anthracene	<1650	1650
Dibenzofuran	<1650	1650
1,3-Dichlorobenzene	<330	330
1,4-Dichlorobenzene	<330	330
1,2-Dichlorobenzene	<330	330
3,3'-Dichlorobenzidine	<670	670
2,4-Dichlorophenol	<660	660
2,6-Dichlorophenol	<330	330
Diethylphthalate	<660	660
2,4-Dimethylphenol	<660	660
Dimethylphthalate	<660	660
p-(Dimethylamino)azobenzene	<330	330
7,12-Dimethylbenz(a)anthracene	<330	330
3,3'-Dimethylbenzidine	<330	330
a,a-Dimethylphenethylamine	<330	330
1,3-Dinitrobenzene	<330	330
Di-n-butylphthalate	<660	660

Client Name: Safewater Technologies, Inc.
Submission #: 9808000410
Project Name: CH2M HILL - CARSWELL
Report Date: 08/27/98

EMI-VOLATILES APPENDIX IX (EPA 8270)

<u>Analyte</u>	<u>Results(ug/kg)</u>	<u>Detection Limit</u>
4,6-Dinitro-2-methylphenol	<660	660
2,4-Dinitrophenol	<1650	1650
2,6-Dinitrotoluene	<660	660
2,4-Dinitrotoluene	<660	660
Di-n-octylphthalate	<660	660
bis (2-Ethylhexyl) phthalate	<660	660
Dinoseb	<330	330
Diphenylamine	<330	330
Ethyl Methanesulfonate	<330	330
Fluoranthene	<330	330
Fluorene	<330	330
Hexachlorobenzene	<330	330
Hexachlorobutadiene	<330	330
Hexachlorocyclopentadiene	<330	330
Hexachloroethane	<330	330
Hexachlorophene	<330	330
Hexachloropropylene	<330	330
Indeno (1,2,3-cd) pyrene	<330	330
Isophorone	<660	660
Isosafrole	<330	330
Methapyrilene (HCl)	<330	330
3-Methylcholanthrene	<330	330
Methyl Methanesulfonate	<330	330
2-Methylnaphthalene	<330	330
2-Methylphenol	<660	660
3-Methylphenol	<330	330
4-Methylphenol	<660	660
Naphthalene	<330	330
1,4-Naphthoquinone	<330	330
1-Naphthylamine	<330	330
2-Naphthylamine	<330	330
2-Nitroaniline	<660	660
4-Nitroaniline	<1650	1650
3-Nitroaniline	<1650	1650
Nitrobenzene	<660	660
2-Nitrophenol	<660	660
4-Nitrophenol	<1650	1650
4-Nitroquinoline-1-oxide	<330	330
N-Nitrosodi-n-butylamine	<330	330
N-Nitrosodiethylamine	<330	330
N-Nitrosodimethylamine	<330	330
N-Nitrosodi-n-propylamine	<330	330
N-Nitrosodiphenylamine	<660	660
N-Nitrosomethylalkylamine	<330	330
N-Nitrosomorpholine	<330	330
N-Nitrosopyrrolidine	<330	330
5-Nitro-o-Toluidine	<330	330
Pentachlorobenzene	<330	330
Pentachloronitrobenzene	<330	330
Pentachloroethane	<330	330
Pentachlorophenol	<1650	1650
Phenacetin	<330	330
Phenanthrene	<330	330
Phenol	<330	330
p-Phenylenediamine	<330	330
Phorate	<330	330
2-Picoline	<330	330
Pyrene	<330	330

6521504

Client Name: Safewater Technologies, Inc.
 Submission #: 9808000410
 Project Name: CH2M HILL - CARSWELL
 Report Date: 08/27/98

SEMI-VOLATILES APPENDIX IX (EPA 8270)

<u>Analyte</u>	<u>Results(ug/kg)</u>	<u>Detection Limit</u>
Pyridine	<330	330
Safrole	<330	330
1,2,4,5-Tetrachlorobenzene	<330	330
2,3,4,6-Tetrachlorophenol	<330	330
o-Toluidine	<330	330
1,2,4-Trichlorobenzene	<330	330
2,4,6-Trichlorophenol	<660	660
2,4,5-Trichlorophenol	<660	660
1,3,5-Trinitrobenzene	<330	330

VOLATILES (EXPANDED EPA 8260)

Date Analyzed: 08/24/98

<u>Analyte</u>	<u>Results(ug/kg)</u>	<u>Detection Limit</u>
Acetone	<10	10
Benzene	<5.0	5.0
Bromobenzene	<5.0	5.0
Bromochloromethane	<15	15
Bromoform	<10	10
2-Butanone (MEK)	<20	20
Butyl Benzene (total)	<10	10
Carbon Disulfide	<10	10
Carbon Tetrachloride	<3.0	3.0
Chlorobenzene	<5.0	5.0
Chlorodibromomethane	<5.0	5.0
Chloroethane	<10	10
Chloroform	<10	10
Chlorotoluenes (total)	<10	10
1,2-Dibromo-3-chloropropane	<5.0	5.0
1,2-Dibromoethane	<10	10
Dibromomethane	<10	10
1,2-Dichlorobenzene	<5.0	5.0
1,3-Dichlorobenzene	<5.0	5.0
1,4-Dichlorobenzene	<5.0	5.0
Dichlorobromomethane	<3.0	3.0
Dichlorodifluoromethane	<10	10
1,1-Dichloroethane	<5	5
1,2-Dichloroethane	<5.0	5.0
cis-1,2-Dichloroethene	<5.0	5.0
trans-1,2-Dichloroethene	<10	10
1,1-Dichloroethene	<5.0	5.0
1,2-Dichloropropane	<6.0	6.0
2,2-Dichloropropane	<5.0	5.0
cis-1,3-Dichloropropene	<6.0	6.0
trans-1,3-Dichloropropene	<6.0	6.0
1,1-Dichloropropene	<10	10
Ethyl Benzene	<8.0	8.0
Hexachlorobutadiene	<10	10
2-Hexanone	<10	10
Isopropyl Benzene	<5.0	5.0
p-Isopropyl toluene	<5.0	5.0
4-Methyl-2-Pentanone	<5.0	5.0
Methyl Bromide	<10	10
Methyl Chloride	<10	10
Methylene Chloride	<15	15
Naphthalene	<10	10
n-Propyl benzene	<5.0	5.0
Styrene	<10	10
1,1,2,2-Tetrachloroethane	<5.0	5.0

Client Name: Safewater Technologies, Inc.
Submission #: 9808000410
Project Name: CH2M HILL - CARSWELL
Report Date: 08/27/98

VOLATILES (EXPANDED EPA 8260)

<u>Analyte</u>	<u>Results(ug/kg)</u>	<u>Detection Limit</u>
1,1,1,2-Tetrachloroethane	<10	10
Tetrachloroethene	<3.0	3.0
Toluene	<3.0	3.0
Trichlorobenzenes (total)	<15	15
1,1,1-Trichloroethane	<5.0	5.0
1,1,2-Trichloroethane	<5.0	5.0
Trichloroethene	<5.0	5.0
Trichlorofluoromethane	<10	10
1,2,3-Trichloropropane	<5.0	5.0
Trimethylbenzenes (total)	<10	10
Vinyl Acetate	<5.0	5.0
Vinyl Chloride	<2.0	2.0
Xylene (Total)	<10	10

6521506

Report To: Safewater Technologies, Inc.
 Lab Number: 9808000410
 Page 14 of 16

Project: CH2M Hill-Carswell

VOLATILE ORGANICS QUALITY CONTROL DATA

<u>METHOD</u>	<u>ANALYST</u>	<u>MATRIX</u>	<u>DATE EXTRACTED</u>	<u>DATE ANALYZED</u>		
<u>SPIKE COMPOUND</u>	<u>SPIKE AMOUNT</u>	<u>% REC 1</u>	<u>% REC 2</u>	<u>% REC QC LIMIT</u>	<u>% VAR.</u>	<u>% VAR QC LIMIT</u>
1,1-Dichloroethene	20 ppb	110	107	20-234	2.7	25.0
Trichloroethene	20 ppb	97.2	104	71-157	6.5	25.0
Benzene	20 ppb	96.7	103	37-151	6.1	25.0
Toluene	20 ppb	98.8	105	47-150	5.9	25.0
Chlorobenzene	20 ppb	107	114	37-160	6.1	25.0

VOLATILE ORGANICS QUALITY CONTROL DATA

<u>METHOD</u>	<u>ANALYST</u>	<u>MATRIX</u>	<u>DATE EXTRACTED</u>	<u>DATE ANALYZED</u>		
<u>SPIKE COMPOUND</u>	<u>SPIKE AMOUNT</u>	<u>% REC 1</u>	<u>% REC 2</u>	<u>% REC QC LIMIT</u>	<u>% VAR.</u>	<u>% VAR QC LIMIT</u>
1,1-Dichloroethene	20 ppb	109	110	20-234	0.91	25.0
Trichloroethene	20 ppb	99.2	103	71-157	3.7	25.0
Benzene	20 ppb	100	99.7	37-151	0.30	25.0
Toluene	20 ppb	99.9	101	47-150	1.1	25.0
Chlorobenzene	20 ppb	108	111	37-160	2.7	25.0

SEMI-VOLATILES QUALITY CONTROL DATA

<u>METHOD</u>	<u>ANALYST</u>	<u>MATRIX</u>	<u>DATE EXTRACTED</u>	<u>DATE ANALYZED</u>		
<u>SPIKE COMPOUND</u>	<u>SPIKE AMOUNT</u>	<u>% REC 1</u>	<u>% REC 2</u>	<u>% REC QC LIMIT</u>	<u>% VAR.</u>	<u>% VAR QC LIMIT</u>
Phenol	200 ppb	69.8	63.4	10-120	9.2	42.0
2-Chlorophenol	200 ppb	66.5	60.7	23-134	8.7	40.0
Acenaphthene	100 ppb	86.9	78.0	47-145	10	31.0
Pyrene	100 ppb	80.4	72.6	52-125	9.7	31.0

Report To: Safewater Technologies, Inc.
 Number: 9808000410
 Page 15 of 16

Project: CH2M Hill-Carswell

SEMI-VOLATILES QUALITY CONTROL DATA

<u>METHOD</u>	<u>ANALYST</u>	<u>MATRIX</u>	<u>DATE EXTRACTED</u>		<u>DATE ANALYZED</u>	
<u>SPIKE COMPOUND</u>	<u>SPIKE AMOUNT</u>	<u>% REC</u> <u>1</u>	<u>% REC</u> <u>2</u>	<u>% REC QC LIMIT</u>	<u>% VAR.</u>	<u>% VAR QC LIMIT</u>
Phenol	200 ppb	109	100	10-120	8.3	42.0
2-Chlorophenol	200 ppb	109	103	23-134	5.5	40.0
Acenaphthene	100 ppb	71.4	67.0	47-145	6.2	31.0
Pyrene	100 ppb	61.6	55.8	52-125	9.4	31.0

QUALITY CONTROL DATA

<u>ANALYTE</u>	<u>DATE ANALYZED</u>	<u>SPIKE (ppm)</u>	<u>STAND. DEV.</u>	<u>COEFF. OF VAR %</u>	<u>REC1%</u>	<u>REC2%</u>
Aluminum	8/26/98	4.0	0.534	9.4	101.2	116.3
Mercury	8/26/98	4.0	0.808	14.8	97.2	120.1
Arsenic	8/26/98	4.0	0.912	18.4	85.0	110.8
Barium	8/26/98	4.0	0.132	2.0	127.5	131.2
Beryllium	8/26/98	4.0	0.760	14.7	92.7	114.2
Boron	8/26/98	4.0	1.403	27.1	74.9	114.6
Cadmium	8/26/98	4.0	0.844	16.2	92.5	116.4
Chromium	8/26/98	4.0	0.488	8.5	107.6	121.4
Cobalt	8/26/98	4.0	0.538	9.9	101.0	116.2
Copper	8/26/98	4.0	0.905	17.0	86.3	111.9
Iron	8/26/98	4.0	0.685	12.3	96.8	116.2
Titanium	8/26/98	4.0	0.615	10.6	107.0	124.4
Mercury	8/26/98	4.0	1.040	22.5	76.7	106.1
Manganese	8/26/98	4.0	0.704	12.1	106.4	126.3
Molybdenum	8/26/98	4.0	0.560	10.1	101.7	117.5
Vanadium	8/26/98	4.0	0.646	11.7	101.4	119.6
Nickel	8/26/98	4.0	0.626	11.9	96.5	114.2
Lead	8/26/98	4.0	0.621	11.2	101.3	118.9
Antimony	8/26/98	4.0	0.712	14.5	89.3	109.5
Selenium	8/26/98	4.0	0.921	18.9	84.6	110.7
Thallium	8/26/98	4.0	0.620	11.1	102.8	120.4
Zinc	8/26/98	4.0	0.926	18.4	87.3	113.5
Silver	8/26/98	4.0	0.264	5.7	95.9	88.4
Arsenic	8/26/98	4.0	0.248	6.2	83.5	76.5

Standard Deviation = $(x_1 - x_2)/1.414$

Coefficient of Variability % = $(S.D./Avg.) \times 100$

Recovery % = $[(\text{spiked}-\text{unspiked})/\text{expected}] \times 100$

6521508

Report To: Safewater Technologies, Inc.
 Lab Number: 9808000410
 Page 16 of 16

Project: CH2M Hill-Carswell

QUALITY CONTROL DATA (Continued)

<u>ANALYTE</u>	<u>DATE ANALYZED</u>	<u>SPIKE (ppm)</u>	<u>STAND. DEV.</u>	<u>COEFF. OF VAR %</u>	<u>REC1%</u>	<u>REC2%</u>
Barium	8/26/98	4.0	0.026	0.4	82.8	82.0
Beryllium	8/26/98	4.0	0.283	6.9	86.5	78.5
Boron	8/26/98	4.0	0.245	7.1	89.6	82.7
Cadmium	8/26/98	4.0	0.286	6.4	93.5	85.4
Chromium	8/26/98	4.0	0.145	3.2	92.5	88.4
Cobalt	8/26/98	4.0	0.171	3.8	90.2	85.4
Copper	8/26/98	4.0	0.303	6.5	94.2	85.6
Titanium	8/26/98	4.0	0.322	6.5	79.1	70.0
Mercury	8/26/98	4.0	0.279	6.9	83.6	75.7
Manganese	8/26/98	4.0	0.020	0.3	77.2	77.1
Molybdenum	8/26/98	4.0	0.182	4.4	86.2	81.1
Vanadium	8/26/98	4.0	0.224	4.9	91.4	85.0
Nickel	8/26/98	4.0	0.210	4.8	89.6	83.6
Lead	8/26/98	4.0	0.102	2.1	90.0	87.2
Antimony	8/26/98	4.0	0.211	5.6	79.0	73.0
Selenium	8/26/98	4.0	0.281	7.1	83.9	75.9
Thallium	8/26/98	4.0	0.170	4.1	87.1	82.3
Zinc	8/26/98	4.0	0.290	6.0	83.8	75.6

Standard Deviation = $(x_1 - x_2) / 1.414$ Coefficient of Variability % = $(S.D./Avg.) \times 100$ Recovery % = $[(spiked - unspiked) / expected] \times 100$

6521509

Purchase Order/Maintain Of Custody

Anachem, Inc. 8 Prestige Circle, Suite 104, Allen, TX 75002 Phone: 972-727-9003 Fax: 972-727-9686

Page 1 of

Report To: Davis Cassell		Bill To: (Buyer)		Analysis	
Company: Safeway Inc	Address: 10210 Saven Dr.	Purchase Order #: 10001			
Address: Dallas, TX 75235	Address: 10001		City, State, Zip:		
City, State, Zip: 75219	Phone: 972-411-0628		Fax: 972-411-4291		
Phone: 972-411-0628	Project Name: CH ₄ H ₄ :11 - Caswell		Phone: Fax:		
Project Location: RT Wertheim	City, State: TX		Quote #:		
Date Due:	Rush: 0%	25%	50%	100%	Sampled By: DK
Lab#	Client Sample ID		Matrix	Date/Time	Sample Notes
113673	1. 52708249E - I1		H ₂ O	08/24/98 11:00	1A-1 240A-103
JL74	2. 52708249E - I2		H ₂ O	08/24/98 11:00	1A-1 240A-103
	3.				
113675	4. 52708249E - SI		SO ₂ :1	08/24/98 11:00	4 gass
	5.				
	6.				
	7.				
	8.				
	9.				
	10.				
Relinquished By: <i>hufford</i>	Date: 8/24/98	Time: 1:15	Received By: <i>David Thonkoff</i>	Date: 8/24/98	Time: 1:15
					Temperature: 4°C
					Preserved Property
					COC Seals Intact
					Method of Shipment
					Submission # 9808-410

In the event that Anachem determines that a sample is hazardous, the client agrees to:
 Pay For Sample Disposal
 Accept Returned Sample

Sample information is vital for proper login and reporting. This is a contract subject to the terms and conditions on the reverse side.

GENERATOR/MAILING ADDRESS FOR ORIGINAL

ABC A - NAS FT WORTH TX 76114	
Name	
C. S. W. C. & T. S. T. L. E. M. A. T. R. M.	
Address	
City	TX
State	76114
Contact	ELIOT SMITH
Phone	512-731-8773 X13

No 107255


REPUBLIC
 INDUSTRIES, INC.
 1-800-256-9278

Landfill Permit #

Location AVAIL

NON-HAZARDOUS WASTE MANIFEST

GENERATOR CERTIFICATE: I, as a representative of SALTWATER TECHNOLOGIES/NAS FT WORTH,
 certify that this shipment consists of 12 TONS 40 cu D.M. cubic yards/tons of
 non-hazardous SOIL (name of waste material) and
 is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 650018323
- Non-hazardous Municipal Special Waste DALLAS
- Non-hazardous Industrial waste. If generated in Texas, it is a Class II waste assigned Waste Code Number 75-3A
- Non-hazardous Railroad Commission Regulated waste from facility or pit,
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from facility or location
- Other, explain:

GENERATOR

Printed/Typed Name <u>Elliott Smith</u>	Signature <u>Elliot Smith</u>	Date Shipped Month Day Year <u>9 3 98</u>
--	----------------------------------	---

TRANSPORTER

Printed/Typed Name <u>J. Lair</u>	Signature <u>J. Lair</u>	Date Shipped Month Day Year <u>9 3 98</u>
--------------------------------------	-----------------------------	---

LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE

Printed/Typed Name <u>NSE Disposal</u>	Signature <u>W. S. Dean</u>	Date Shipped Month Day Year <u>9 15 98</u>
---	--------------------------------	--

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND
WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

PP-1

GENERATOR/MAILING ADDRESS FOR ORIGINAL

6521511

NAME WAS F. L. SMITH TRB	
ADDRESS 1553 LAKESIDE SETTLEMENT RD	
City	TX
State	76114
Contact	LILYTT SMITH
Phone	512-731-8773X13



REPUBLIC
INDUSTRIES, INC.

1-800-256-9278

Landfill Permit #

Location AVACO

NON-HAZARDOUS WASTE MANIFEST

GENERATOR CERTIFICATE: I, as a representative of

certify that this shipment consists of 12 TONS 20 LDM LD cubic yards/tons of non-hazardous (name of waste material) and is classified as follows:

- Non-hazardous petroleum contaminated soils, Waste Code Number 650048903 Ln. 3-1-1
- Non-hazardous Municipal Special Waste TX 75214
- Non-hazardous industrial waste, If generated in Texas, it is a Class II waste assigned Waste Code Number
- Non-hazardous Railroad Commission Regulated waste from facility or pit.
- Wastewater treatment plant, septic tank, grease trap, or grit trap waste from facility or location, or
- Other, explain:

GENERATOR

Printed/Typed Name

Signature

Date Shipped

Month Day Year

9 3 98

TRANSPORTER

Printed/Typed Name

Signature

Date Shipped

Month Day Year

9 3 98

LANDFILL OPERATOR CERTIFICATE OF RECEIPT OF WASTE

Printed/Typed Name

Signature

Date Shipped

Month Day Year

9 3 98

DO NOT SEPARATE FORM UNTIL ALL SIGNATURES ARE COMPLETED AND
WASTE HAS BEEN RECEIVED BY LANDFILL AND SIGNED BY LANDFILL OPERATOR.

PP-1

TAB

APPENDIX I ESTIMATION OF CONCENTRATIONS IN AMBIENT AIR

Appendix I

Estimation of Concentrations in Ambient Air

Volatile emissions from groundwater to ambient air were estimated using the emissions model (Table I-1) presented in the ASTM guidance for Risk-Based Corrective Action (ASTM, 1995). The chemical-specific parameters for this model are presented in Table I-2.

The volatilization factor calculated with this model is based on the depth to groundwater, which ranges from 8 to 25 feet across the site. A value of 9.84 feet was used to represent the groundwater depth at AOC2. All other assumptions are default values supplied in ASTM, 1995. These are screening models which rely upon conservative assumptions that tend to overstate the magnitude of emissions to air from groundwater.

Concentrations in air were estimated for the maximum concentration of each chemical detected in groundwater from the monitoring wells. Evaluation of potential human exposure and health risks associated with inhalation of ambient air was based on these maximum concentrations.

Appendix I, Table I-1
RBCA Volatilization Factor - Groundwater to Ambient Air (VF_{wamb}) Exposure Pathway

Site Description:	NAS Fort Worth JRB AOC2
Date of Analysis:	09/10/1998
Analyst:	Gayle Lytle

Volatilization Factor Model Description:

$$VF_{wamb} = \frac{H}{1 + \left[\frac{U_{air} d_{air} L_{GW}}{W D_{ws}^{eff}} \right]} \times 10^3 \frac{L}{m^3}$$

Calculation of Effective Diffusion Coefficients:

Diffusion coefficient from groundwater to soil

$$D_{ws}^{eff} = (h_{cap} + h_v) \left(\frac{h_{cap}}{D_{cap}^{eff}} + \frac{h_v}{D_s^{eff}} \right)^{-1}$$

Diffusion coefficient through the capillary fringe

$$D_{cap}^{eff} = D_{air}^{air} \frac{q_{acap}^{3.33}}{q_T^2} + \frac{D_{ws}^{ws}}{H} \frac{q_{ws}^{3.33}}{q_T^2}$$

Diffusion coefficient through soil

$$D_s^{eff} = D_{air}^{air} \frac{q_{ws}^{3.33}}{q_T^2} + \frac{D_{ws}^{ws}}{H} \frac{q_{ws}^{3.33}}{q_T^2}$$

Appendix I, Table I-1 (Continued)
Site-specific Parameters:

Symbol	Description	ASTM Industrial Default Parameter	Site-Specific Parameter
H	Henry's Law constant (unitless)	chem	chem
U_{air}	Windspeed above ground surface in ambient air mixing zone (cm/s)	225	225
d_{dir}	Ambient air mixing zone height (cm)	200	200
L_{GW}	Depth to groundwater (cm)	300	300
W	Width of source area parallel to wind direction (cm)	1500	1500
q_{ws}	Volumetric water content of soil (unitless)	0.12	0.12
k_3	Soil/water partition coefficient (calculated from $k_c \times f_{\infty}$)	chem	chem
q_{as}	Volumetric air content of soil (unitless)	0.26	0.26
q_{cap}	Volumetric air content of capillary fringe (unitless)	0.038	0.038
q_{wet}	Volumetric water content of the capillary fringe (unitless)	0.342	0.342
q_T	Total soil porosity	0.38	0.38
h_v	Thickness of the vadose zone (cm)	295	295
h_{cap}	Thickness of the capillary fringe (cm)	5	5
Def_{ws}	Effective diffusion coefficient from groundwater to soil surface (cm^2/s)	calc	calc
Def_{cap}	Effective diffusion coefficient through the capillary fringe (cm^2/s)	calc	calc
Def_s	Effective diffusion coefficient in soil (cm^2/s)	calc	calc

Appendix I, Table I-2
Chemical-specific Parameters and Calculated Values:

Chemical	Diffusion coefficient in air (cm ² /s)	Diffusion coefficient in water (cm ² /s)	Henry's Law Constant (unitless)	Calculated Deff _s (cm ² /s)	Calculated Deff _{cap} (cm ² /s)	Calculated Deff _{ws} (cm ² /s)	VF _{wamb} (mg/m ³ per mg/L)
Benzene	8.80E-02	9.80E-06	2.28E-01	0.0069	1.97E-05	0.00101	2.56E-05
Toluene	8.70E-02	8.60E-06	2.72E-01	0.0068	1.74E-05	0.00091	2.74E-05
m,p-Xylene	8.70E-02	1.00E-05	2.13E-01	0.0068	2.04E-05	0.00104	2.46E-05
Ethylbenzene	7.50E-02	7.80E-06	3.23E-01	0.0059	1.44E-05	0.00075	2.70E-05
1,1-Dichloroethene	9.00E-02	1.04E-05	1.07E+00	0.0070	1.35E-05	0.00073	8.66E-05
1,2,4-Trimethylbenzene	7.50E-02	7.10E-06	2.34E-01	0.0059	1.56E-05	0.00081	2.10E-05
1,2-Dichloroethane	1.04E-01	9.90E-06	4.01E-02	0.0081	6.14E-05	0.00255	1.14E-05
1,3,5-Trimethylbenzene	7.50E-02	7.10E-06	3.16E-01	0.0059	1.41E-05	0.00074	2.59E-05
Chloroform	1.04E-01	1.00E-05	1.50E-01	0.0081	2.64E-05	0.00133	2.22E-05
cis-1,2-Dichloroethene	7.36E-02	1.13E-05	1.67E-01	0.0057	2.26E-05	0.00110	2.05E-05
Isopropylbenzene	7.50E-02	7.10E-06	4.76E+01	0.0059	9.72E-06	0.00053	2.81E-03
Methane							
Naphthalene	5.90E-02	7.50E-06	1.98E-02	0.0046	8.13E-05	0.00239	5.26E-06
n-Butylbenzene	7.50E-02	7.80E-06	5.37E-01	0.0059	1.25E-05	0.00067	3.98E-05
n-Propylbenzene	7.50E-02	7.80E-06	5.37E-01	0.0059	1.25E-05	0.00067	3.98E-05
p-Isopropyltoluene							
sec-Butylbenzene	7.50E-02	7.80E-06	7.67E-01	0.0059	1.17E-05	0.00063	5.33E-05
tert-Butylbenzene	7.50E-02	7.80E-06	5.17E-01	0.0059	1.26E-05	0.00067	3.86E-05
Tetrachloroethylene	7.20E-02	8.20E-06	7.54E-01	0.0056	1.14E-05	0.00061	5.13E-05
Toluene	8.70E-02	8.60E-06	2.72E-01	0.0068	1.74E-05	0.00091	2.74E-05
trans-1,2-Dichloroethene	7.07E-02	1.19E-05	3.85E-01	0.0055	1.51E-05	0.00078	3.34E-05
Trichloroethylene	7.90E-02	9.10E-06	4.22E-01	0.0062	1.44E-05	0.00076	3.56E-05
Vinyl chloride	1.06E-01	1.23E-06	1.11E+00	0.0083	1.39E-05	0.00076	9.34E-05

TAB

APPENDIX J DERIVATION OF THE SOIL VOLATILIZATION FACTOR
AND PARTICULATE EMISSION FACTOR

Appendix J

Derivation of the Soil Volatilization Factor and Particulate Emission Factor

This appendix describes the calculation of volatilization factors (VF_s) for volatile contaminants and particulate emission factors (PEF) for nonvolatile contaminants. These factors relate soil contaminant concentrations to air contaminant concentrations that may be inhaled onsite. The VF_s and PEF equations can be broken into two separate models: an emission model to estimate emissions of the contaminant from the soil and a dispersion model to simulate the dispersion of the contaminant in the atmosphere.

Note that the box model previously used to estimate concentrations in air has been replaced with a dispersion term (Q/C) derived from a modeling exercise using meteorological data from 29 locations across the United States (EPA, 1995a). The dispersion model for both volatiles and particulates is the AREA-ST, an updated version of the Office of Air Quality Planning and Standards, Industrial Source Complex Model, ISC2. However, different Q/C terms are used in the VF and PEF equations. Los Angeles was selected as the 90th percentile data set for volatiles and Minneapolis was selected as the 90th percentile data set for fugitive dusts (EPA, 1994). A default source size of 0.5 acres was chosen. This is consistent with the default exposure area over which Region IX typically averages contaminant concentrations in soils (EPA, 1995).

Volatilization Factor for Soils

Volatile chemicals, defined as those chemicals having a Henry's Law constant greater than 10^{-5} (atm-m³/mol) and a molecular weight less than 200 g/mole, were screened for inhalation exposures using a volatilization factor for soils (VF_s).

The emission terms used in the VF_s are chemical-specific and were calculated from physical-chemical information obtained from a number of sources including *Superfund Exposure Assessment Manual* (SEAM) (EPA, 1988), *Superfund Public Health Evaluation Manual* (EPA, 1986), *Subsurface Contamination Reference Guide* (EPA, 1990) and *Fate and Exposure Data*

(Howard, 1991). In those cases where Diffusivity Coefficients (Di) were not provided in existing literature, Di's were calculated using Fuller's Method described in SEAM.

The following equation forms the basis for deriving VFs for the inhalation pathway.

$$VF_s \left(\frac{m^3}{kg} \right) = \left(\frac{Q}{C} \right) \times \frac{(3.14 \times \alpha \times t)^{1/2}}{(2 \times D_{ei} \times \theta_a \times K_{as})} \times 10^{-4} \frac{m^2}{cm^2}$$

Where:

$$\alpha = \frac{D_{ei} \times \theta_a}{\theta_a + \left[\frac{(\rho_s)(1 - \theta_a)}{K_{as}} \right]}$$

Parameters used to derive the volatilization factor are shown in Table J-1.

Table J-1
Summary of Parameters used to Derive Volatilization Factor

Symbol	Definition (units)	Default
VF _s	Volatilization factor (m ³ /kg)	--
Q/C	Inverse of the mean conc. at the center of a 0.5-acre square source (g/m ² -s per kg/m ³)	68.81
T	Exposure interval (s)	7.9 x 10 ⁸
D _{ei}	Effective diffusivity (cm ² /s)	D _i (θ _a ^{3.33} /n ²)
θ _a	Air filled soil porosity (L _{air} /L _{soil})	0.28 or n-wρ _b
D _i	Diffusivity in air (cm ² /s)	Chemical-specific
n	Total soil porosity (L _{pore} /L _{soil})	0.43 (loam)
w	Average soil moisture content (g _{water} /g _{soil} or cm ³ _{water} /g _{soil})	0.1
ρ _b	Dry soil bulk density (g/cm ³)	1.5 or (1-n)ρ _s
ρ _s	Soil particle density (g/cm ³)	2.65
K _{as}	Soil-air partition coefficient (g-soil/cm ³ -air)	(H/Kd) x 41 (41 is a conversion factor)
H	Henry's Law constant (atm-m ³ /mol)	Chemical-specific
K _d	Soil-water partition coefficient (cm ³ /g)	K _{oc} x f _{oc}
K _{oc}	Soil organic carbon/water partition coefficient (cm ³ /g)	Chemical-specific
f _{oc}	Fraction organic carbon content of soil (g/g)	0.02 or site-specific

Particulate Emission Factor for Soils

Inhalation of chemicals adsorbed to respirable particles (PM₁₀) were assessed using a default PEF equal to 1.316 x 10⁹ m³/kg. This factor relates the contaminant concentration in soil with the concentration of respirable particles in the air due to fugitive dust emissions from

contaminated soils. The relationship is derived by Cowherd's (EPA, 1985) rapid assessment procedure for sites, where the surface contamination is assumed to provide a relatively continuous and constant potential for emission over an extended period of time (e.g. years).

With the exception of specific metals, the PEF does not appear to significantly affect estimates of total exposures (EPA, 1995a). The PEF equation is as follows:

$$PEF \frac{m^3}{kg} = \frac{Q}{C} \times \frac{\frac{3600s}{h}}{0.36 \times (1 - V) \times \left(\frac{U_m}{U_t} \right)^3 \times F(x)}$$

Parameters used to derive the PEF are shown in Table J-2.

Table J-2 Summary of Parameters used to Derive Particulate Emission Factor		
Symbol	Definition (units)	Default
PEF	Particulate emission factor (m^3/kg)	1.316×10^9
Q/C	Inverse of the mean concentration at the center of a 0.5-acre square source ($g/m^2\text{-s}$ per kg/m^3)	
V	Fraction of vegetative cover (unitless)	0.5
U_m	Mean annual windspeed (m/s)	4.69
U_t	Equivalent threshold value of windspeed at 7 m (m/s)	11.32
$F(x)$	Function dependent on U_m/U_t derived using Cowherd (1995) (unitless)	0.194

Note. the PEF considers only windborne dust emissions and does not consider dust emissions from traffic or other forms of mechanical disturbance.

TAB

APPENDIX K HAZARD INDEX AND EXCESS LIFETIME
CANCER RISK CALCULATIONS

Appendix K, Table K-1
Surface Water Concentrations, Bioconcentration Factors, and Concentrations In Fish
NAS Fort Worth JRB, Texas

Chemical	Concentration In Surface Water (ug/L)	Bioconcentration Factor (L/kg)	Bioconcentration Species	Reference	Concentration In Fish (mg/kg)
1,2,4-Trimethylbenzene	91	158.5 (a)	(see xylenes)		14.4235
1,3,5-Trimethylbenzene	11.44	158.5 (a)	(see xylenes)		1.81324
n-Butylbenzene	1.976	10.7 (b)	(see toluene)		0.0211432
n-Propylbenzene	13	10.7 (b)	(see toluene)		0.1391
Naphthalene	25.22	310	Bluegill sunfish (<i>Lepomis macrochirus</i>)	McCarthy and Jimenez, 1985 in Eisler, 1987	7.8182
Sec-Butylbenzene	4.42	10.7 (b)	(see toluene)		0.047294
Methane	123.5	--			
p-isopropyltoluene	0.884	10.7 (b)	(see toluene)		0.0094588
Tert-Butylbenzene	0.91	10.7 (b)	(see toluene)		0.009737
1,1-Dichloroethene	2.548	5.6	fish	EPA, 1987	0.0142688
1,2-Dichloroethane	0.91	1.99	fish	Banerjee and Baughman, 1981	0.0018109
1-Methylethylbenzene (Cumene)	10.14	10.7 (b)	(see toluene)		0.108498
Benzene	33.8	4.4	Pacific herring (<i>Clupea harengus pallas</i>)	Howard, 1989	0.14872
Chloroform	2.6	6	Bluegill sunfish (<i>Lepomis macrochirus</i>)	Howard, 1990	0.0156
Cis-1,2-Dichloroethene	65	1.6	fish	EPA, 1987	0.104
Ethylbenzene	11.7	15.5	Goldfish	Howard, 1989	0.18135
m,p-Xylene	18.98	21.4 - 158.5	fish	Howard, 1989	3.00833
Tetrachloroethylene	17.68	38.9	2-fathead minnow (<i>Pimephales promelas</i>)	Howard, 1990	0.687752
Toluene	3.64	10.7	fish	EPA, 1987	0.038948
Trans-1,2-Dichloroethene	33.8	1.6	fish	EPA, 1987	0.054408

Appendix K, Table K-1
Surface Water Concentrations, Bioconcentration Factors, and Concentrations in Fish
NAS Fort Worth JRB, Texas

Chemical	Concentration in Surface Water (ug/L)	Bioconcentration Species	Reference	Concentration in Fish (mg/kg)
		Factor (L/kg)		
Trichloroethene	312	17 <i>Bluegill sunfish (Lepomis macrochirus)</i>	Howard, 1990	5.304
Vinyl chloride	3.38	1.17 fish	EPA, 1987	0.0039546
Fluoride	1.664	-		
Aluminum	1869.4	231 fish	EPA, 1988	431.8314
Lead	1.04	7.8 to 160 <i>Brook trout (Salvelinus fontinalis)</i>	Adams, 1975 in AQUIRE, 1994	0.1664

Notes:

Bioconcentration Factors not available for several chemicals so

- (a) BCF for xylenes substituted
- (b) BCF for toluene substituted

- not available

- Adams, E.S. 1975 Effects of lead and hydrocarbons from snowmobile exhaust on brook trout (*Salvelinus fontinalis*) Trans Am Fish Soc. 102: 363-373
AQUIRE 1994 Aquatic information retrieval - version 5 00/3 4, August. Chemical Information Systems, Inc Baltimore, MD
Bansjee, S. and G L. Baughman 1991 Bioconcentration factors and lipid solubility Env Sci Tech 25: 536-539
Eisler, R 1987 Polycyclic aromatic hydrocarbon hazards to fish, wildlife, and invertebrates. a synoptic review U.S. Fish and Wildlife Service. Biological Report 85(1.11)
Howard, P H (ed.) 1989 Handbook of environmental fate and exposure data: volume I – large production and priority pollutants. Lewis Pub Inc , Chelsea, MI
Howard, P H (ed) 1990 Handbook of environmental fate and exposure data: volume IV – solvents 2. Lewis Pub Inc., Chelsea, MI.
U.S. Environmental Protection Agency 1987. Superfund public health evaluation manual. Office of Emergency and Remedial Response EPA/540/r-86/060
U.S Environmental Protection Agency 1988 Ambient water quality criteria for aluminum Washington D C . Office of Water Regulations and Standards, Criteria and Standards Division.
EPA-440/5-86-008

Appendix K, Table K-2
Soil - Construction Worker Scenario
AOC2 NAS Fort Worth JRB

Noncarcinogenic**Ingestion:**

Intake for non-carcinogenic compounds:

$$\text{CDI} = \frac{\text{Cs} * \text{IR} * \text{FI} * \text{EF} * \text{ED} * \text{CF}}{\text{BW} * \text{AT}}$$

Cs =	Concentration in soil (mg/kg)	RME
IR =	Ingestion Rate (mg/day)	480 b
FI =	Fraction Ingested (unitless)	100%
EF =	Exposure Frequency (day/year)	60 a
ED =	Exposure Duration (year)	0.23 a
CF =	Conversion Factor (kg/mg)	1.00E-06
BW =	Body Weight (kg)	70 b
AT =	Averaging Time (yr)	0.23

Dermal:

Intake for non-carcinogenic and carcinogenic compounds:

$$\text{CDI} = \frac{\text{Cs} * \text{SA} * \text{AF} * \text{ABS} * \text{EF} * \text{ED} * \text{CE}}{\text{BW} * \text{AT}}$$

Cs =	Concentration in soil (mg/kg)	RME
SA =	Surface Area (cm ²)	2500 b
AF =	Soil-Skin Adherence Factor (mg/cm ²)	0.2 b
ABS =	Absorption Factor (unitless)	(Chemical Specific) c
EF =	Exposure Frequency (day/year)	60 a
ED =	Exposure Duration (year)	0.23 a
CF =	Conversion Factor (kg/mg)	1.00E-06
BW =	Body Weight (kg)	70 b
AT =	Averaging Time (yr)	0.23

Inhalation:

Intake for non-carcinogenic compounds:

$$\text{CDI} = \frac{\text{Cs} * (1/\text{PEF} + \text{VF}) * \text{IR} * \text{EF} * \text{ED}}{\text{BW} * \text{AT}}$$

Cs =	Concentration in soil (mg/kg)	RME
PEF =	Particulate Emission Factor (m ³ /kg)	1.32E+09 a
VF =	Volatilization Factor (m ³ /kg)	(Chemical Specific)
IR =	Inhalation Rate (m ³ /day)	20 a
EF =	Exposure Frequency (day/year)	60 a
ED =	Exposure Duration (year)	0.23 a
BW =	Body Weight (kg)	70 b
AT =	Averaging Time (yr)	0.23

References:

a = U.S. EPA, Human Health Evaluation Manual, Supplemental Guidance: "Standard Default Factors" OSWER Directive 9285.6-03, March 25, 1991.

b = TNRCC Risk Reduction Standards

c = ABS values used from Draft: Assessing Dermal Exposure from Soil, Region III EPA Manual, Risk Assessment, 1995.

6521525

Appendix K, Table K-2
Soil - Construction Worker Scenario - NonCarcinogenic
AOC2 NAS Fort Worth JRB

Units	Chemical	Ingestion			Dermal			Inhalation			Sum of Pathways	
		WOE	RDo	RDI	RME	ABS	VF	CDI	HQ	CDI	HQ	
MG/KG	1,2,4-TRIMETHYLBENZENE	NA	5.00E-02	6.00E-03	1.50E-01	0.1	2.10E-05	6.17E-05	1.23E-03	1.89E-04	3.15E-02	3.27E-02
MG/KG	1,3,5-TRIMETHYLBENZENE	NA	5.00E-02	6.00E-03	5.00E-02	0.1	2.39E-05	2.06E-05	4.11E-04	7.78E-05	1.30E-02	66.52%
MG/KG	ETHYLBENZENE	D	1.00E-01	1.00E+00	3.20E-02	0.1	2.70E-05	1.32E-04	5.19E-05	5.19E-05	1.34E-02	27.20%
MG/KG	m,p-XYLENE	NA	2.00E+00	4.30E-01	1.20E-01	0.1	2.46E-05	4.94E-05	2.47E-05	4.11E-04	1.84E-04	0.37%
MG/KG	N-BUTYLBENZENE	NA	1.00E-02	1.50E-02	1.50E-02	0.1	3.98E-05	6.17E-06	6.17E-04	3.58E-05	4.36E-04	0.89%
MG/KG	N-PROPYLBENZENE	NA	1.00E-02	1.90E-02	0.1	3.98E-05	7.82E-06	7.82E-04	4.53E-05	6.17E-04	7.82E-04	1.25%
MG/KG	SEC-BUTYLBENZENE	NA	1.00E-02	1.20E-02	0.1	5.33E-05	4.94E-06	4.94E-04	3.84E-05	3.84E-05	7.82E-04	1.59%
MG/KG	TEST-BUTYLBENZENE	NA	1.00E-02	1.40E-02	0.1	3.86E-05	5.76E-06	5.76E-04	3.24E-05	4.94E-04	4.94E-04	1.00%
Hazard Index												
Notes		WOE = Weight of Evidence, CDI = Chronic Daily Intake, RME = Reasonable Maximum Exposure Concentration, HQ = Hazard Quotient, HI = Hazard Index										
		8.68% 91.32%										
		4.27E-03 4.5E-02 4.92E-02										

Appendix K, Table K-3
Groundwater - Construction Worker Scenario
AOC2 NAS Fort Worth JRB

Inhalation of Volatiles from Groundwater

Intake for non-carcinogenic and carcinogenic compounds:

$$\text{CDI} = \frac{C_{gw} * VF * IR * EF * ED}{BW * AT}$$

	<u>Carcinogenic</u>	<u>Noncarcinogenic</u>
C_{gw} =	Concentration in groundwater (mg/L)	Max
IR =	Inhalation Rate (m ³ /day)	20
EF =	Exposure Frequency (day/year)	40
ED =	Exposure Duration (year)	1
BW =	Body Weight (kg)	70
AT =	Averaging Time (days)	25550
		365

Reference: U S. Environmental Protection Agency EPA. 1991. *Risk Assessment Guidance for Superfund. Vol. 1 Human Health Evaluation Manual. Supplemental Guidance "Standard Exposure Factors."* Draft Final, March 25, 1991. OSWER Directive 9285 6-03

Appendix K, Table K-3
Groundwater - Construction Worker Scenario - Carcinogenic
AOC2 NAS Fort Worth JRB

Units	Chemical	WOE	SFo	URF	<u>Inhalation</u>			
					Max	VF	CDI	ELCR
UG/L	1,2,4-Trimethylbenzene				3.50E+02	2.10E-05	2.88E-07	
UG/L	1,3,5-Trimethylbenzene				4.40E+01	2.59E-05	4.47E-08	
UG/L	n-Butylbenzene				7.60E+00	3.98E-05	1.18E-08	
UG/L	n-Propylbenzene				5.00E+01	3.98E-05	7.78E-08	
UG/L	Naphthalene	D			9.70E+01	5.26E-06	2.00E-08	
UG/L	sec-Butylbenzene				1.70E+01	5.33E-05	3.55E-08	
UG/L	Methane				4.75E+02			
UG/L	p-Isopropyltoluene				3.40E+00	2.81E-03	3.73E-07	
UG/L	tert-Butylbenzene				3.50E+00	3.86E-05	5.28E-09	
UG/L	1,1-Dichloroethene	C	6.00E-01	5.00E-05	9.80E+00	8.66E-05	3.32E-08	1.66E-12
UG/L	1,2-Dichloroethane	B2	9.10E-02	2.60E-05	3.50E+00	1.14E-05	1.56E-09	4.05E-14
UG/L	1-Methylethylbenzene (Cumene)	D			3.90E+01	2.81E-03	4.28E-06	
UG/L	Benzene	A	2.90E-02	7.80E-06	1.30E+02	2.56E-05	1.30E-07	1.02E-12
UG/L	Chloroform	B2	6.10E-03	2.30E-05	1.00E+01	2.22E-05	8.68E-09	2.00E-13
UG/L	Cis-1,2-Dichloroethene	D			2.50E+02	2.05E-05	2.00E-07	
UG/L	Ethylbenzene	D			4.50E+01	2.70E-05	4.76E-08	
UG/L	m,p-Xylene	D			7.30E+01	2.46E-05	7.02E-08	
UG/L	Tetrachloroethylene	C-B2	5.10E-02	5.80E-07	6.80E+01	5.13E-05	1.36E-07	7.91E-14
UG/L	Toluene	D			1.40E+01	2.74E-05	1.50E-08	
UG/L	Trans-1,2-Dichloroethene	D			1.30E+02	3.34E-05	1.70E-07	
UG/L	Trichloroethene	B2	1.10E-02	1.70E-06	1.20E+03	3.56E-05	1.67E-06	2.84E-12
UG/L	Vinyl chloride	A	1.90E+00	8.40E-05	1.30E+01	9.34E-05	4.75E-08	3.99E-12
MG/L	Fluoride				6.40E+00			
UG/L	Aluminum				7.19E+03			
UG/L	Lead				4.00E+00			

Total Risk
Notes WOE = Weight of Evidence; CDI = Chronic Daily Intake; RME = Reasonable Maximum Exposure
 ELCR = Excess Lifetime Cancer Risk

1E-11

Appendix K, Table K-3
Groundwater - Construction Worker Scenario - NonCarcinogenic
AOC2 NAS Fort Worth JRB

Units	Chemical	WOE	RfDo	RfC	RME	VF	Inhalation	
							CDI	HQ
UG/L	1,2,4-Trimethylbenzene	5.00E-02	6.00E-03	3.50E+02	2.10E-05	8.05E-07	1.34E-04	
UG/L	1,3,5-Tnmethylbenzene	5.00E-02	6.00E-03	4.40E+01	2.59E-05	1.25E-07	2.08E-05	
UG/L	n-Butylbenzene		1.00E-02		7.60E+00	3.98E-05	3.31E-08	
UG/L	n-Propylbenzene				5.00E+01	3.98E-05	2.18E-07	
UG/L	Naphthalene	D	2.00E-02	3.00E-03	9.70E+01	5.26E-06	5.59E-08	1.86E-05
UG/L	sec-Butylbenzene		1.00E-02		1.70E+01	5.33E-05	9.94E-08	
UG/L	Methane				4.75E+02			
UG/L	p-Isopropyltoluene		1.00E-01	4.00E-01	3.40E+00	2.81E-03	1.05E-06	2.61E-06
UG/L	tert-Butylbenzene		1.00E-02		3.50E+00	3.86E-05	1.48E-08	
UG/L	1,1-Dichloroethene	C	9.00E-03		9.80E+00	8.66E-05	9.30E-08	
UG/L	1,2-Dichloroethane	B2		8.10E-01	3.50E+00	1.14E-05	4.36E-09	5.38E-09
UG/L	1-Methylethylbenzene (Cumene)	D	1.00E-01	4.00E-01	3.90E+01	2.81E-03	1.20E-05	3.00E-05
UG/L	Benzene	A		6.00E-03	1.30E+02	2.56E-05	3.65E-07	6.09E-05
UG/L	Chloroform	B2	1.00E-02	9.70E-02	1.00E+01	2.22E-05	2.43E-08	2.51E-07
UG/L	Cis-1,2-Dichloroethene	D	1.00E-02	7.90E-01	2.50E+02	2.05E-05	5.61E-07	7.10E-07
UG/L	Ethylbenzene	D	1.00E-01	1.00E+00	4.50E+01	2.70E-05	1.33E-07	1.33E-07
UG/L	m,p-Xylene	D	2.00E+00	4.30E-01	7.30E+01	2.46E-05	1.97E-07	4.57E-07
UG/L	Tetrachloroethylene	C-B2	1.00E-02	2.70E-01	6.80E+01	5.13E-05	3.82E-07	1.41E-06
UG/L	Toluene	D	2.00E-01	4.00E-01	1.40E+01	2.74E-05	4.20E-08	1.05E-07
UG/L	Trans-1,2-Dichloroethene	D	2.00E-02	7.90E-01	1.30E+02	3.34E-05	4.76E-07	6.03E-07
UG/L	Trichloroethene	B2			1.20E+03	3.56E-05	4.68E-06	
UG/L	Vinyl chloride	A			1.30E+01	9.34E-05	1.33E-07	
MG/L	Fluoride		6.00E-02	2.00E-04	6.40E+00			
UG/L	Aluminum		1.00E+00	5.00E-03	7.19E+03			
UG/L	Lead				4.00E+00			

Hazard Index
Notes: WOE = Weight of Evidence, CDI = Chronic Daily Intake, RME = Reasonable Maximum Exposure
HQ = Hazard Quotient, HI = Hazard Index

2.71E-04

6521529

Appendix K, Table K-4
Surface Water - Residential Scenario
AOC2 NAS Fort Worth JRB

Ingestion of Surface Water - Residential

Intake for non-carcinogenic and carcinogenic compounds:

$$CDI = \frac{C_{sw} * IR * EF * ED * CF}{BW * AT}$$

	<u>Carcinogenic</u>	<u>Noncarcinogenic</u>
C_{sw} =	Concentration in surface water (µg/L)	Modeled value
IR =	Ingestion Rate (L/hour)	2 a
EF =	Exposure Frequency (days/year)	350 a
ED =	Exposure Duration (year)	70
CF =	Conversion factor (10 ⁻⁶ mg/µg)	1.00E-03
BW =	Body Weight (kg)	70
AT =	Averaging Time (days)	25550
		Modeled value
		2 a
		350 a
		30
		1.00E-03
		70
		10950

References:

- (a) Risk Assessment Guidance for Superfund Volume 1 Human Health Evaluation Manual Part A (EPA 1989)
- (b) Dermal Exposure Assessment: Principles and Applications (EPA 1992)
- (c) Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories. (EPA 1994)

Appendix K, Table K-4
Surface Water - Residential Scenario - Carcinogenic
AOC2 NAS Fort Worth JRB

Units	Chemical	Ingestion			Modeled Value ($\mu\text{g/L}$)	CDI	ELCR
		WOE	SFI	CDI			
UG/L	1,2,4-Trimethylbenzene				9.10E+01	2.49E-03	
UG/L	1,3,5-Trimethylbenzene				1.14E+01	3.13E-04	
UG/L	n-Butylbenzene				1.98E+00	5.41E-05	
UG/L	n-Propylbenzene	D			1.30E+01	3.56E-04	
UG/L	Naphthalene				2.52E+01	6.91E-04	
UG/L	sec-Butylbenzene				4.42E+00	1.21E-04	
UG/L	Methane				1.24E+02	3.38E-03	
UG/L	p-Isopropyltoluene				8.84E-01	2.42E-05	
UG/L	tert-Butylbenzene				9.10E-01	2.49E-05	
UG/L	1,1-Dichloroethene	C	6.00E-01	1.75E-01	2.55E+00	6.98E-05	4.19E-05
UG/L	1,2-Dichloroethane	B2	9.10E-02	9.10E-02	9.10E-01	2.49E-05	2.27E-06
UG/L	1-Methylethylbenzene (Cumene)	D			1.01E+01	2.78E-04	
UG/L	Benzene	A	2.90E-02	2.91E-02	3.38E+01	9.26E-04	2.69E-05
UG/L	Chloroform	B2	6.10E-03	8.05E-02	2.60E+00	7.12E-05	4.35E-07
UG/L	Cis-1,2-Dichloroethene	D			6.50E+01	1.78E-03	
UG/L	Ethylbenzene	D			1.17E+01	3.21E-04	
UG/L	m,p-Xylene	D			1.90E+01	5.20E-04	
UG/L	Tetrachloroethylene	C-B2	5.10E-02	2.30E-03	1.77E+01	4.84E-04	2.47E-05
UG/L	Toluene	D			3.64E+00	9.97E-05	
UG/L	Trans-1,2-Dichloroethene	D			3.38E+01	9.26E-04	
UG/L	Trichloroethylene	B2	1.10E-02	5.95E-03	3.12E+02	8.55E-03	9.40E-05
UG/L	Vinyl chloride	A	1.90E+00	3.00E-01	3.38E+00	9.26E-05	1.76E-04
MG/L	Fluoride				1.66E+00	4.56E-05	
UG/L	Aluminum				1.87E+03	5.12E-02	
UG/L	Lead				1.04E+00	2.85E-05	
Total Risk					4E-04		

Notes:

WOE = Weight of Evidence; CDI = Chronic Daily Intake;

ELCR = Excess Lifetime Cancer Risk

Appendix K, Table K-4
Surface Water - Residential Scenario - NonCarcinogenic
AOC2 NAS Fort Worth JRB

Units	Chemical	WOE	RfDo	RfD	Ingestion	
					Modeled Value ($\mu\text{g/L}$)	HQ
UG/L	1,2,4-Trimethylbenzene	5.00E-02	1.70E-03	9.10E+01	2.49E-03	4.99E-02
UG/L	1,3,5-Trimethylbenzene	5.00E-02	1.70E-03	1.14E+01	3.13E-04	6.27E-03
UG/L	n-Butylbenzene	1.00E-02	1.00E-02	1.98E+00	5.41E-05	5.41E-03
UG/L	n-Propylbenzene			1.30E+01	3.56E-04	
UG/L	Naphthalene	D	4.00E-02	8.60E-04	2.52E+01	6.91E-04
UG/L	sec-Butylbenzene		1.00E-02	1.00E-02	4.42E+00	1.21E-04
UG/L	Methane			1.24E+02	3.38E-03	
UG/L	p-Isopropyltoluene	1.00E-01	1.10E-01	8.84E-01	2.42E-05	2.42E-04
UG/L	tert-Butylbenzene	1.00E-02	1.00E-02	9.10E-01	2.49E-05	2.49E-03
UG/L	1,1-Dichloroethene	C	9.00E-03	9.00E-03	2.55E+00	6.98E-05
UG/L	1,2-Dichloroethane	B2		9.10E-01	2.49E-05	7.76E-03
UG/L	1-Methylethylbenzene (Cumene)	D	1.00E-01	1.10E-01	1.01E+01	2.78E-04
UG/L	Benzene	A	1.71E-03	3.38E+01	9.26E-04	2.78E-03
UG/L	Chloroform	B2	1.00E-02	1.00E-02	2.60E+00	7.12E-05
UG/L	Cis-1,2-Dichloroethene	D	1.00E-02	1.00E-02	6.50E+01	1.78E-03
UG/L	Ethylbenzene	D	1.00E-01	2.86E-01	1.17E+01	3.21E-04
UG/L	m,p-Xylene	D	2.00E+00	2.00E+00	1.90E+01	5.20E-04
UG/L	Tetrachloroethylene	C-B2	1.00E-02	1.10E-01	1.77E+01	4.84E-04
UG/L	Toluene	D	2.00E-01	1.14E-01	3.64E+00	9.97E-05
UG/L	Trans-1,2-Dichloroethene	D	2.00E-02	2.00E-02	3.38E+01	9.26E-02
UG/L	Trichloroethene	B2		3.12E+02	8.55E-03	
UG/L	Vinyl chloride	A	6.00E-02	6.00E-02	3.38E+00	9.26E-05
UG/L	Fluoride			1.00E+00	1.66E+00	4.56E-05
MG/L	Aluminum			1.00E+00	1.87E+03	5.12E-02
UG/L	Lead			1.04E+00	2.85E-05	5.12E-02

Hazard Index

Notes WOE = Weight of Evidence, CDI = Chronic Daily Intake,
HQ = Hazard Quotient, HI = Hazard Index

4.40E-01

4.40E-01

Appendix K, Table K-5
Surface Water - Recreational Scenario
AOC2 NAS Fort Worth JRB

Incidental Ingestion of Surface Water While Swimming

Intake for non-carcinogenic and carcinogenic compounds:

$$\text{CDI} = \frac{C_{sw} * IR * ET * EF * ED * CF}{BW * AT}$$

		<u>Carcinogenic</u>	<u>Noncarcinogenic</u>
C_{sw} =	Concentration in surface water (µg/L)	Modeled value	Modeled value
IR =	Ingestion Rate (L/hour)	0.05 a	0.05 a
ET =	Exposure Time (hours/day)	2.6 a	2.6 a
EF =	Exposure Frequency (days/year)	7 a	7 a
ED =	Exposure Duration (year)	70	30
CF =	Conversion factor (10 ⁻⁶ mg/µg)	1.00E-06	1.00E-06
BW =	Body Weight (kg)	70	70
AT =	Averaging Time (days)	25550	10950

Dermal Contact with Surface Water While Swimming:

Intake for non-carcinogenic and carcinogenic compounds:

$$\text{CDI} = \frac{C_{sw} * SA * PC * ET * EF * ED * CF}{BW * AT}$$

		Modeled value	Modeled value
C_{sw} =	Concentration in surface water (µg/L)	23000 b	23000 b
SA =	Surface Area (cm ²)	(Chemical Specific) b	(Chemical Specific) b
PC =	Dermal Permeability Constant (cm/hr)	2.6 a	2.6 a
ET =	Exposure Time (hr/day)	7 a	7 a
EF =	Exposure Frequency (day/year)	70	70
ED =	Exposure Duration (year)	1.00E-06	1.00E-06
CF =	Conversion Factor (mg/µg and L/cm ³)	70	70
BW =	Body Weight (kg)	25550	25550
AT =	Averaging Time (days)		

Ingestion of Fish from the West Fork of the Trinity River:

Intake for non-carcinogenic and carcinogenic compounds:

$$\text{CDI} = \frac{Cs_w * BCF * IR * FI * EF * ED}{BW * AT}$$

		Modeled value	Modeled value
C_{sw} =	Concentration in surface water (mg/L)	(Chemical Specific)	(Chemical Specific)
BCF =	Bioconcentration Factor (L/kg)	0.227 c	0.227 c
IR =	Intake Rate for Fish (mg/meal)	1	1
FI =	Fraction Ingested	204 c	204 c
EF =	Exposure Frequency (meals/year)	70	30
ED =	Exposure Duration (year)	70	70
BW =	Body Weight (kg)	25550	10950
AT =	Averaging Time (days)		

References:

- (a) Risk Assessment Guidance for Superfund Volume 1 Human Health Evaluation Manual Part A (EPA 1989)
- (b) Dermal Exposure Assessment: Principles and Applications (EPA 1992)
- (c) Guidance for Assessing Chemical Contaminant Data for Use in Fish Advisories. (EPA 1994)

Appendix K, Table K-5
Surface Water- Recreational Scenario - Carcinogenic
AOC2 NAS Fort Worth JRB

Units	Chemical	WOE	SFO	SFI	Modulated Value ($\mu\text{g/L}$)	Conc. In Fish (mg/kg)	K_p (cm/hr)	Ingestion			Dermal			Fish Ingestion	
								BCF (L/kg)	CDI	ELCR	CDI	ELCR	CDI	ELCR	
UG/L	1,2,4-Trimethylbenzene				9.10E+01	1.59E-02	1.44E+01	8.00E-02	3.24E-06	1.19E-04			2.61E-02		
UG/L	1,3,5-Trimethylbenzene				1.14E+01	1.59E+01	1.81E+00	8.00E-02	4.07E-07	1.50E-05			3.29E-03		
UG/L	n-Butylbenzene				1.98E+00	1.07E+01	2.11E-02	4.50E-02	7.04E-08	1.46E-06			3.83E-05		
UG/L	n-Propylbenzene				1.30E+01	1.07E+01	1.39E-01	4.50E-02	4.63E-07	9.58E-06			2.52E-04		
UG/L	Naphthalene	D			2.52E+01	3.10E+02	7.82E+00	6.90E-02	8.98E-07	2.85E-05			1.42E-02		
UG/L	sec-Butylbenzene				4.42E+00	1.07E+01	4.73E-02	4.50E-02	1.57E-07	3.26E-06			8.57E-05		
UG/L	Methane				1.24E+02				4.40E-06						
UG/L	p-isopropyltoluene				8.84E-01	1.07E+01	9.46E-03	4.50E-02	3.15E-08	6.52E-07					
UG/L	ter-Butylbenzene				9.10E-01	1.07E+01	9.74E-03	4.50E-02	3.24E-08	6.71E-07			1.71E-05		
UG/L	1,1-Dichloroethene	C	6.00E-01	1.75E-01	5.60E+00	1.43E-02	1.60E-02	9.08E-08	5.45E-08	6.68E-07	4.01E-07	2.59E-06	1.55E-05		
UG/L	1,2-Dichloroethane	B2	9.10E-02	9.10E-02	1.99E+00	1.81E-03	5.30E-03	3.24E-08	2.95E-09	7.90E-08	7.19E-09	3.28E-06	2.99E-07		
UG/L	1-Methylethylbenzene (Cumene)	D			1.01E+01	1.07E+01	1.08E-01	5.00E-02	3.61E-07	7.48E-06			1.97E-04		
UG/L	Benzene	A	2.90E-02	2.70E-02	3.38E+01	4.40E+00	1.49E-01	2.10E-02	1.20E-06	3.49E-08	1.16E-05	3.37E-07	7.82E-06		
UG/L	Chloroform	B2	6.10E-03	8.05E-02	2.60E+00	1.56E-02	8.90E-03	9.26E-08	5.65E-10	3.79E-07	2.31E-09	2.83E-05	1.72E-07		
UG/L	Cis-1,2-Dichloroethene	D			6.50E+01	1.60E+00	1.04E-01	1.00E-03	2.32E-06	1.06E-06			1.88E-04		
UG/L	Ethylbenzene	D			1.17E+01	1.55E+01	1.81E-01	7.40E-02	4.17E-07	1.42E-05			3.29E-04		
UG/L	m,p-Xylene	D			1.90E+01	1.59E+02	3.01E+00	8.00E-02	6.76E-07	2.49E-05			5.45E-03		
UG/L	Tetrachloroethylene	C-B2	5.20E-02	7.70E-02	1.77E+01	3.89E+01	6.88E-01	4.80E-02	6.30E-07	3.27E-08	1.39E-05	7.23E-07	1.25E-03	6.48E-05	
UG/L	Toluene	D			3.64E+00	1.07E+01	3.89E-02	4.50E-02	1.30E-07	2.68E-06			7.06E-05		
UG/L	Trans-1,2-Dichloroethene	B2	1.10E-02	5.95E-03	3.12E+02	1.70E+01	5.30E+00	1.60E-02	1.11E-05	1.22E-07	8.18E-05	9.00E-07	9.61E-03	1.06E-04	
UG/L	Vinyl chloride	A	1.90E+00	2.90E-01	3.38E+00	1.17E+00	3.95E-03	7.30E-03	1.20E-07	2.29E-07	4.04E-07	7.68E-07	7.17E-06	1.36E-05	
UG/L	Fuonide				1.66E+00										
UG/L	Aluminum				1.87E+03	2.31E+02	4.32E+02	1.00E-03	6.66E-05	3.06E-05			7.83E-01		
UG/L	Lead				1.04E+00	1.60E+02	1.66E-01	1.00E-03	3.70E-08	1.70E-08			3.02E-04		
											5E-07	3E-06	2E-04		

Notes:

WOE = Weight of Evidence, CDI = Chronic Daily Intake; BCF = Bioconcentration Factor

ELCR = Excess Lifetime Cancer Risk

Appendix K, Table K-5
Surface Water - Recreational User Scenario - NonCarcinogenic
AOC2 NAS Fort Worth JRB

Units	Chemical	WOE	RfDo	RfDI	Modeled Value			Conc. In Fish			Ingestion			Dermal			Fish Ingestion		
					($\mu\text{g/L}$)	(L/kg)	(mg/kg)	(cm^3/hr)	Kp	CDI	HQ	CDI	HQ	CDI	HQ	CDI	HQ		
UG/L	1,2,4-Trimethylbenzene	5.00E-02	1.70E-03	9.10E+01	1.59E+02	1.44E+01	8.00E-02	3.24E-06	6.48E-05	1.19E-04	2.38E-03	2.61E-02	5.23E-01						
UG/L	1,3,5-Trimethylbenzene	5.00E-02	1.70E-03	1.14E+01	1.59E+02	1.81E+00	8.00E-02	4.07E-07	8.15E-06	1.50E-05	3.00E-04	3.29E-03	6.57E-02						
UG/L	n-Butylbenzene	1.00E-02	1.00E-02	1.98E+00	1.07E+01	2.11E-02	4.50E-02	7.04E-08	7.04E-06	1.46E-06	1.46E-04	3.83E-05	3.83E-03						
UG/L	n-Propylbenzene	1.00E-02	1.00E-02	1.30E+01	1.07E+01	1.39E-01	4.50E-02	4.63E-07	4.63E-06	9.58E-06	9.58E-04	2.52E-04	2.52E-02						
UG/L	Naphthalene	D	2.00E-02	8.60E-04	2.52E+01	3.10E+02	7.82E+00	6.90E-02	8.98E-07	4.49E-05	2.88E-05	1.42E-03	1.42E-02	7.09E-01					
UG/L	sec-Butylbenzene		1.00E-02	1.00E-02	4.42E+00	1.07E+01	4.73E-02	4.50E-02	1.57E-05	1.57E-05	3.26E-06	3.26E-04	8.57E-05	8.57E-03					
UG/L	Methane									4.40E-06									
UG/L	p-Isopropyltoluene		1.00E-01	1.10E-01	8.84E-01	1.07E+01	9.46E-03	4.50E-02	3.15E-08	3.15E-07	6.52E-07	6.52E-06	1.71E-05	1.71E-04					
UG/L	tert-Butylbenzene		1.00E-02	1.00E-02	9.10E-01	1.07E+01	9.74E-03	4.50E-02	3.24E-08	3.24E-06	6.71E-07	6.71E-05	1.76E-05	1.76E-03					
UG/L	1,1-Dichloroethene	C	9.00E-03	2.55E+00	5.60E+00	1.43E-02	1.60E-02	9.00E-08	1.01E-05	6.68E-07	7.42E-06	2.59E-05	2.87E-03						
UG/L	1,2-Dichloroethane	B2	2.30E-01	9.10E-01	1.99E+00	1.81E-03	5.30E-03	3.24E-08		7.90E-08		3.28E-06							
UG/L	1-Methylethylbenzene (Cumene)	D	1.00E-01	1.10E-01	1.01E+01	1.07E+01	1.08E-01	4.50E-02	3.61E-07	3.61E-06	7.48E-06	7.48E-05	1.97E-03						
UG/L	Benzene	A	1.71E-03	3.38E+01	4.40E+00	1.49E-01	2.10E-02	1.20E-06		1.16E-05		2.70E-04							
UG/L	Chloroform	B2	1.00E-02	2.80E-02	2.60E+00	6.00E+00	1.56E-02	8.90E-03	9.26E-06	3.79E-07	3.79E-05	2.83E-05	2.83E-03						
UG/L	Cis-1,2-Dichloroethene	D	1.00E-02	2.30E-01	6.50E+01	1.60E+00	1.04E-01	1.00E-03	2.32E-06	2.32E-04	1.06E-06	1.06E-04	1.88E-02						
UG/L	Ethylbenzene	D	1.00E-01	2.86E-01	1.17E+01	1.55E+01	1.81E-01	7.40E-02	4.17E-07	4.17E-06	1.42E-05	1.42E-04	3.29E-03						
UG/L	m,p-Xylyne	D	2.00E+00	1.20E-01	1.90E+01	1.59E+02	3.01E+00	8.00E-02	6.76E-07	3.38E-07	2.49E-05	1.24E-05	5.45E-03	2.73E-03					
UG/L	Tetrachloroethylene	C-B2	1.00E-02	1.10E-01	1.77E+01	3.89E+01	6.88E-01	4.80E-02	6.30E-07	6.30E-05	1.39E-05	1.39E-03	1.25E-01						
UG/L	Toluene	D	2.00E-01	1.14E-01	3.64E+00	1.07E+01	3.89E-02	4.50E-02	1.30E-07	6.48E-07	2.68E-06	1.34E-05	7.06E-05	3.53E-04					
UG/L	Trans-1,2-Dichloroethene	D	2.00E-02	2.30E-01	3.38E+01	1.60E+00	5.41E-02	1.00E-02	1.20E-08	8.02E-05	5.54E-06	2.77E-04	9.80E-05	4.90E-03					
UG/L	Trichloroethene	B2																	
UG/L	Vinyl chloride	A																	
MG/L	Fluoride		6.00E-02	5.70E-04	1.66E+00				1.00E-03	5.93E-08	9.88E-07	2.73E-08	4.54E-07						
UG/L	Aluminum		1.00E+00	1.40E-03	1.87E+03	2.31E+02	4.32E-02	1.00E-03	6.66E-05	3.06E-05	3.06E-05	7.83E-01	7.83E-01						
UG/L	Lead								1.04E+00	1.60E-02	1.66E-01	1.00E-03	3.70E-08	1.70E-08	3.02E-04				

Hazard Index

WOE = Weight of Evidence, CDI = Chronic Daily Intake; BCF = Bioconcentration Factor
HQ = Hazard Quotient, HI = Hazard Index

2.28E+00

8.41E-04

7.77E-03

Notes

FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE